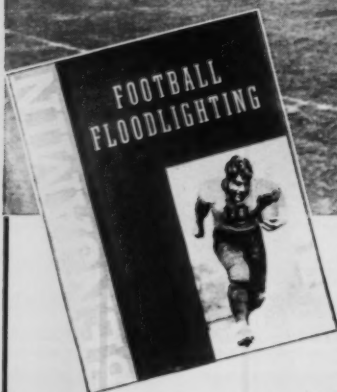
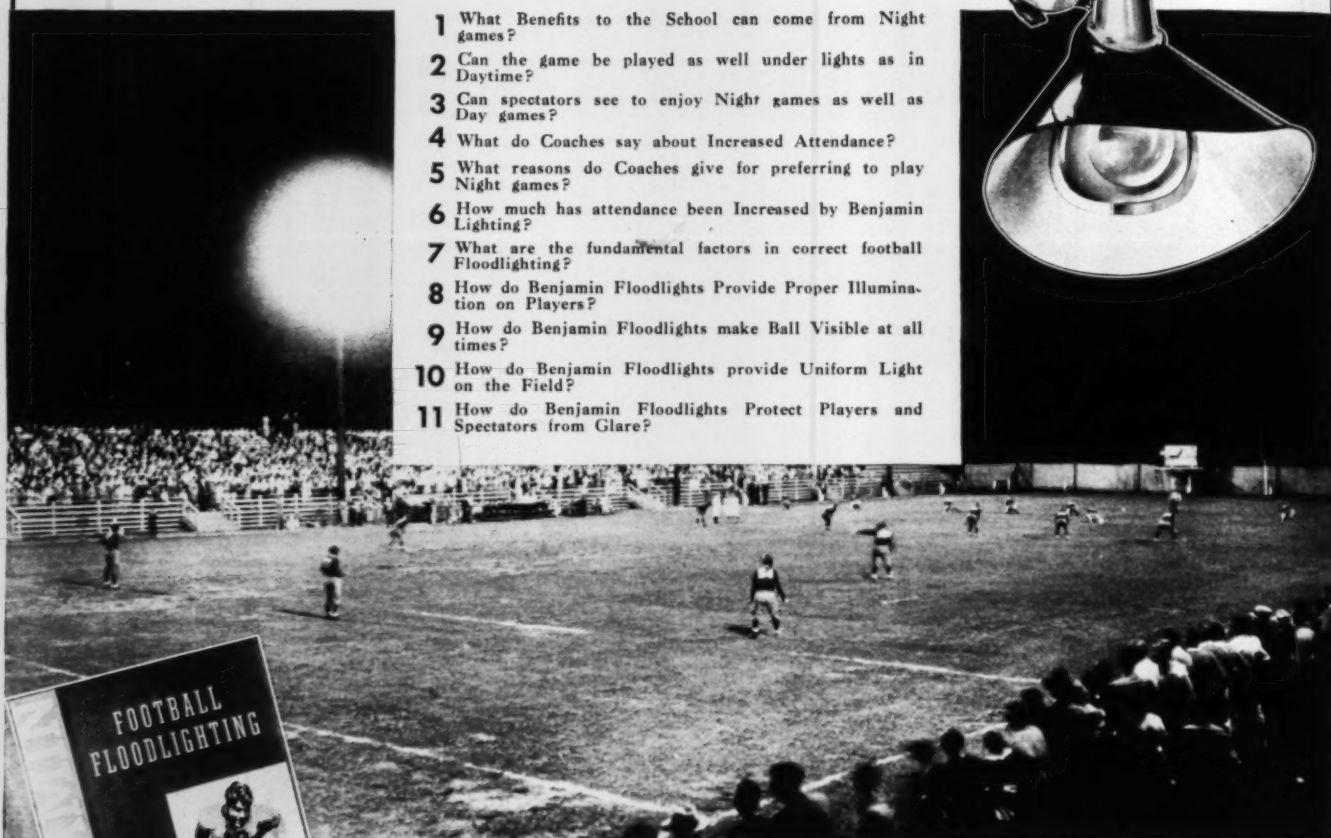




# Do You Know the Answers to These Questions About FOOTBALL FLOODLIGHTING?

- 1 What Benefits to the School can come from Night games?
- 2 Can the game be played as well under lights as in Daytime?
- 3 Can spectators see to enjoy Night games as well as Day games?
- 4 What do Coaches say about Increased Attendance?
- 5 What reasons do Coaches give for preferring to play Night games?
- 6 How much has attendance been Increased by Benjamin Lighting?
- 7 What are the fundamental factors in correct football Floodlighting?
- 8 How do Benjamin Floodlights Provide Proper Illumination on Players?
- 9 How do Benjamin Floodlights make Ball Visible at all times?
- 10 How do Benjamin Floodlights provide Uniform Light on the Field?
- 11 How do Benjamin Floodlights Protect Players and Spectators from Glare?



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# SCHOLASTIC COACH

Reg. U. S. Pat. Off.

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Editor: JACK LIPPERT Managing Editor: OWEN REED  
Assistant Editor: H. L. MASIN

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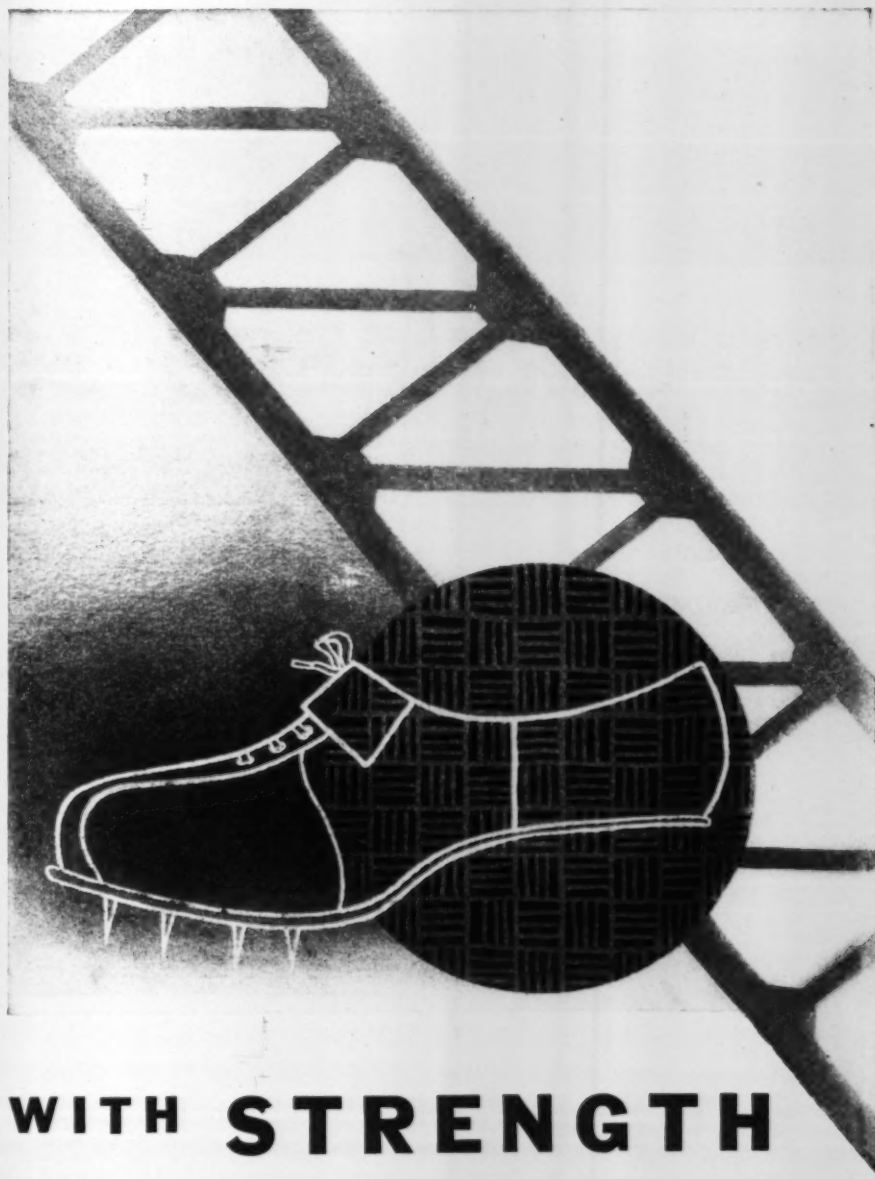
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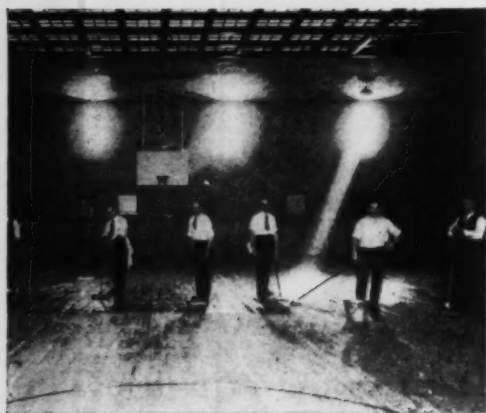
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# Here Below

**WE** MANAGE to get around to most of the really important athletic events, and were not surprised nor displeased when the boss told us to pack up and hit the trail for Angels Camp, Calaveras County, Calif., where the international broad-jumping championship for frogs is held each year.

It was the first event of its kind we had ever attended, and, of course, we didn't want to go off half-cocked. As is our wont when in need of advice on matters athletic, we telephoned our friend Dan Ferris, the fun-loving and efficient chief-of-operations of the A.A.U.

Did the meet have a sanction? Were the athletes all registered, the officials approved? Would there be a wind-velocity recording machine, and a steel-tape for accurately measuring the jumps? Would Mark Twain's ghost be present? If so, the A.A.U. would have to revoke the sanction: back in 1875 there was that business about filling Dan'l, the favorite frog, with buck-shot. Not until the Jim Thorpe affair in 1912 was the athletic world to suffer another such shock.

At Angels Camp we found everything on the up-and-up. Very much so. The world's record was broken by a frog named Zip. His record-breaking leap of 15 feet 10 inches\* bettered by 5 inches the mark set last year by Emmett Dalton, a yearling from the late Will Rogers' farm.

A great ovation went up for Zip as he landed in the dirt at the record distance.

After the meet, in the locker room, we found Zip examining the gold medal he had just been awarded.

"Beg your pardon, Mr. Zip, but our readers would enjoy a word or two from you," we ventured.

"Don't doubt they would," he croaked.

"Mr. Zip, to what do you attribute your success?" we asked.

"Well, I lead a good clean life. Don't drink. Don't smoke."

\*From a standing start.



From an old print in the N. Y. Public Library

Foul play floors the Celebrated Jumping Frog of Calaveras County. Even at normal weight, he was a piker compared to the clear-eyed, clean-limbed 1938 champ who leaped 15 ft. 10 in.

"Do you chew?" we asked him.

"Well, I wouldn't call it that. Just say I nibble."

"If you live such a regular life, what makes you so jumpy?" we inquired.

"I've heard it said by some of the Ph.D's," he replied, "that I owe all my success to my os calcis."

"To your what?"

"To my os calcis," he repeated, pointing to the back of his take-off foot.

"Well you're really over our head now. Where did you pick up such language?" we asked.

"It's body mechanics. Sorry I can't go into it now. I've got to go jump in the lake."

"So long, Mr. Zip, it's been nice meeting you."

"Don't mention it," he said, and with a bound he was gone.

## Tweet, Tweet

**H**AVE you a little badminton birdie in your home?

If not, you owe it to the wife and kiddies to add this feathered friend to the household equipage.

The game of badminton is doing noteworthy service toward the preservation of the home and the maintenance of marital tranquility among young married couples of Westchester County, New York State.

"The playing of badminton, which has grown rapidly in popularity in recent years, is keeping many marriages from the divorce courts by attracting young couples who otherwise would be at cocktail parties and neighborhood petting parties."

E. Dana Caulkins, superintendent of the Westchester County Recrea-

tion Commission, agreed that the sport was keeping many couples from using alcohol and that it resulted in "an integration of personalities."

Well, we say hooray for rugged integration. Let's have more of it.

**T**HE Supreme Court of the United States says football is business, so who now, in all patriotism, can deny it?

By a score of 6 to 2 (Justice Cardozo not participating), the highest ranking referees of the country decided that state universities must pay the 10 per cent federal amusement tax on admissions.

Justice Roberts, in the majority decision, wrote:

"It is evident that these exhibition enterprises are comparatively large and are the means of procuring substantial aid for the schools' program of athletics and physical education . . . When a State embarks in a business which would normally be taxable, the fact that in so doing it is exercising a governmental power does not render the activity immune from Federal taxation."

Justices McReynolds and Butler dissented.



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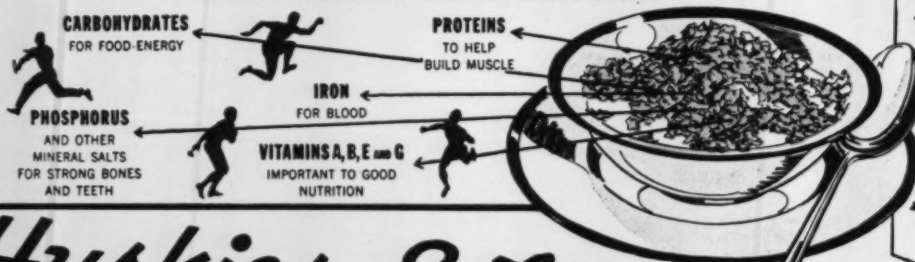
nourishment! They're rich in food-energy... help build muscle, too!

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ALL THE VALUABLE FOOD ESSENTIALS OF WHOLE WHEAT



*Huskies Eat* **HUSKIES**

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# PREVENTION OF FOOTBALL INJURIES

By Arthur Lustig

Several student managers and the coach can prepare 18 players for the game or scrimmage in an hour



LEFT: Worn underneath the regular shoulder pads, this sponge rubber pad provides complete protection for the shoulder and also protects a considerable portion of the pectoral and upper dorsal regions. Note how well the shoulders are protected when the complete harness is adjusted (right). The loose shoulder pieces on the pads have been pushed forward about an inch to provide the collar bone with additional protection.

BELOW: This knee guard is used in place of the one that is cut out of the pants. A "V" is cut on opposite sides of a piece of felt about a foot square and placed over a modified "Duke Simpson" knee wrap. For games and scrimmages the guard is anchored with tape. It is imperative that the leg is slightly flexed while the felt is being adjusted.



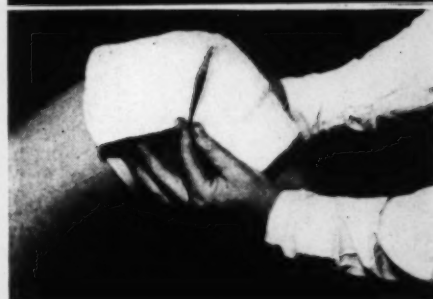
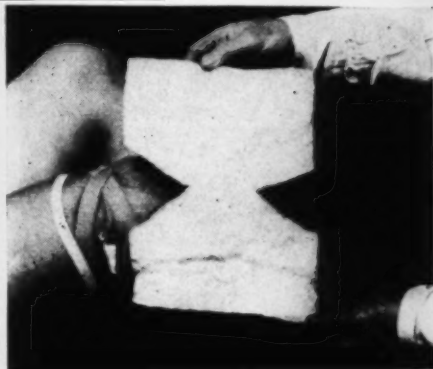
Arthur Lustig coaches football and basketball at the Weequahic High School in Newark, N. J. From conversations with a number of coaches in his state, Lustig believes that too little time is spent in the prevention of football injuries.

So carefully does he safeguard against injuries, that during the past football season his squad did not suffer a single ankle sprain, twisted knee, shoulder injury or bruised rib, kidney or hip. He believes that similar results can be obtained by all schools.

**T**OO OFTEN football coaches are so deeply concerned over formations, scoring plays, schedule making, and other similar problems that they have little time to devote to the prevention of injuries. Most of the coaches know how to take care of injuries once they occur, and can tell you all about whirl-pool baths, hot and cold applications, remedial adhesive taping, massage and a host of other things to bring back into service a player who has been injured. But how many of them do anything to prevent these same injuries?

Perhaps the slow progress in accident prevention is due to the belief on the part of most coaches that a program to cut down injuries must be expensive and involve a considerable loss of time. My own experience does not justify this assumption. Such a program may result in a greater expenditure for adhesive tape, felt, sponge rubber, and certain other medicinal supplies, but this will probably be the best investment made by the school. In several cases, a slight modification of standard football equipment may be necessary. Most manufacturers will gladly make such changes at little or no cost.

While it is true that some extra time is necessary in this matter of



preventing injuries, it is surprising how little time is actually needed. In my experience I have found that with the help of several of the boys on the manager's staff, I can prepare about 18 boys for the game in a little over an hour.

Here's the plan which we employed during the past year. First of all, most coaches will agree that almost as many, and in some cases

more, accidents occur during scrimmages and other practice sessions than in games. Therefore, our boys are prepared for all scrimmages exactly as they would be for games. This rule has paid high dividends.

To prevent irritation to the skin wherever adhesive tape is applied, we advise the boys to shave the hair off the skin first, and then apply a compound of tincture of benzoin directly on the surface to which the tape is to be applied. This tincture of benzoin compound also provides a very good adhesive surface for the tape. About two gallons of this compound will be sufficient for the entire season. We have also found, incidentally, that this compound has practically eliminated "athlete's foot" from our squads.

Wherever strength is required in adhesive tape, we use a brand of adhesive tape which is a good deal stronger than the ordinary type. We have found from experience that not only do we use a good deal less tape in this way, but we also save money and time and have a greater assurance that the tape will not break or tear. We use the ordinary type of adhesive tape when there is little tension or when we wish to secure other tape more firmly. In all of our taping we use two-inch tape, with the exception of the small pieces which we use to anchor these two-inch strips. For this purpose we use the one-half inch ordinary tape.

We have found it expedient in preparing the application of tape to have several of our managers cut the desired number of strips into the proper sizes at least one hour before the squad starts to dress for the game or scrimmage.

Following are the methods which

we use in dealing with the more vulnerable parts of the anatomy.

### Ankles

While there are a good many well-known ankle wraps, all of which are undoubtedly effective, we have employed a fairly simple football strap which has given us complete satisfaction. Our ankle bandage consists of two 20-inch strips applied as follows: The first strip starts on the outer border of the foot, runs over the long metatarsals and is then drawn around under the instep and then firmly up on the outside.

The second piece starts from the inside of the leg about four inches above the ankle joint, and then goes around underneath the heel and is fastened firmly on the outside. We make an effort with this piece to pull the tape up firmly both on the inside and outside, using slightly more pressure on the outside. We do this because almost all ankle sprains occur on the outside of the ankle joint. Two pieces of one half-inch tape about a foot long are used to anchor the two-inch tape strips. It takes about a minute to apply the strips to both ankles.

We emphasize in our ankle strap very little extension of the toes, except in the case of kickers who are permitted a good deal of extension. All four ends of the ankle strips are split down about three inches from the end, and are separated in a "V" shape when applied. The ankle strap is left on all during the week and is replaced for each game or as often as the case demands. Some times the tape becomes loose and must be replaced for each scrimmage.

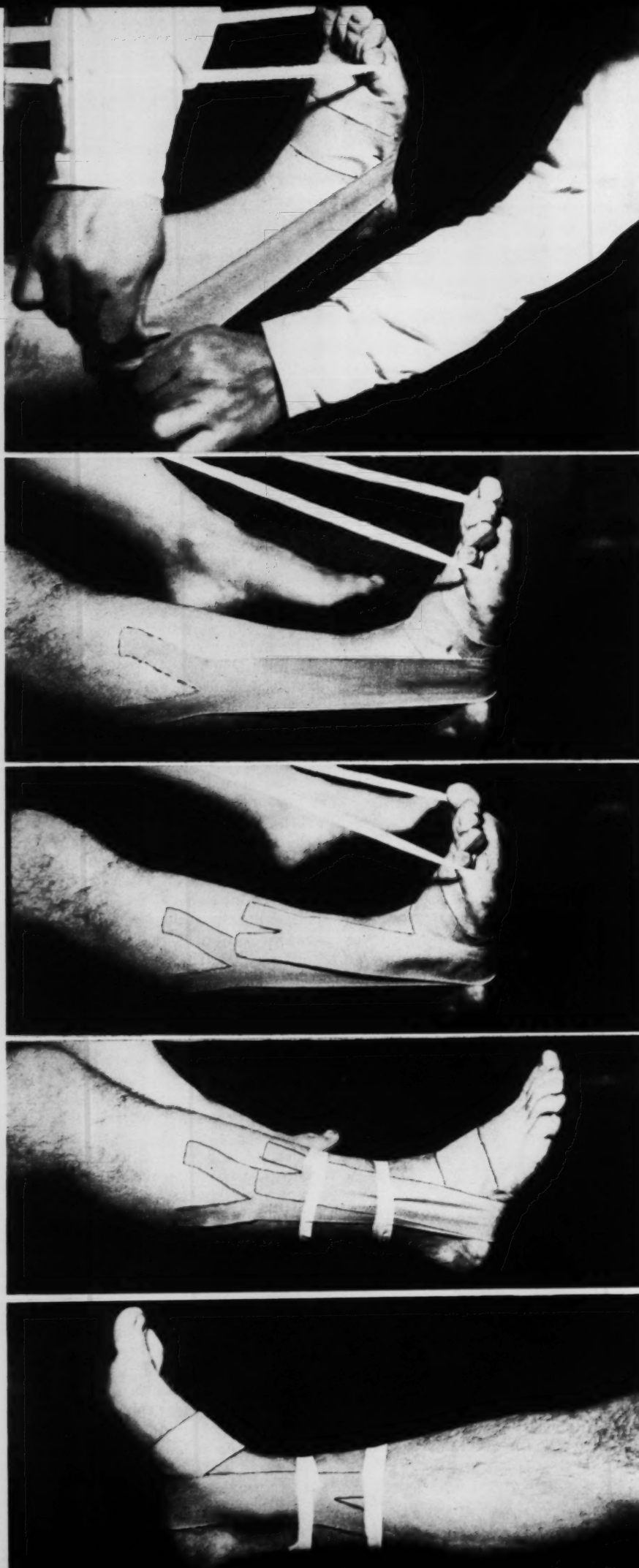
### Knees

All knees are strapped with a modified "Duke Simpson" bandage. We use one piece of adhesive tape about 30 inches long, and a piece of felt cut in the shape of a capital letter "I". This piece of felt varies in length according to the size of the boy's knee. It is generally about a foot long and is cut so that when placed underneath the knee joint, both of the enlarged ends will furnish lateral support to the knee joint, particularly opposite the internal and external cartilages.

The adhesive tape is applied so that an equal amount of tape extends beyond both ends of the felt. This is applied as follows: In order to avoid too much stiffness in the joint and also to prevent possible splitting of the tape, we permit the boy to flex the knee slightly. The felt is placed underneath the knee joint. The tape is split down to where it comes in contact with the felt on both ends, and then is drawn in diamond fashion around the knee joint—leaving the knee cap free. Considerable pressure should be applied

### Left: Ankle Wrap

This bandage should be applied with the leg extended over the table and the foot held at a 90 degree angle. The tape is pulled up firmly both on the inside and outside of the foot.





to bring the felt firmly against the side of the knee joint. Two pieces of one-half inch tape are placed across the four ends of the strap as anchors. This bandage is removed after each game and a fresh one is applied before every scrimmage and game.

### Knee Guards

To prevent injuries around the knee joint, such as water on the knee, puffed knees, etc., we cut out the usual knee pads from the pants. Our pants are now ordered from the manufacturer without knee pads. In their place we use a piece of felt about a foot square. A "V" is cut on two opposite sides to permit flexion of the knee joint. The felt is then placed so that the "V's" are opposite the joint; the guard is applied with the knee bent.

During practice sessions, one-inch elastics are used to hold this knee guard in place. During scrimmages and games, the felt is taped on. A startling reduction in knee injuries resulted from the use of this type of pad. Either three-eighths inch or one-half inch felt is satisfactory for this type of knee guard.

### Thighs

We have not experimented a great deal in keeping down thigh injuries but the few experiences we have had convinced us that most "charley horses" to the thighs can be prevented. Most of these injuries are due to either not having a large enough thigh guard, or to the thigh guard moving around too much and leaving some area unprotected and exposed to injury.

We ordered several pairs of extra large thigh guards for some boys, and strapped these on directly to their thighs. This type of protection not only prevented further injury but enabled several boys to play who already had "charley horses." Next year we intend to follow the same plan for all our boys and we also intend to get pants without the thigh guards, preferring to attach the thigh guards directly to the boy's leg. Some of the other schools have also obtained good results with this method. William Foley, coach of the Bloomfield High state champions, employs this method.

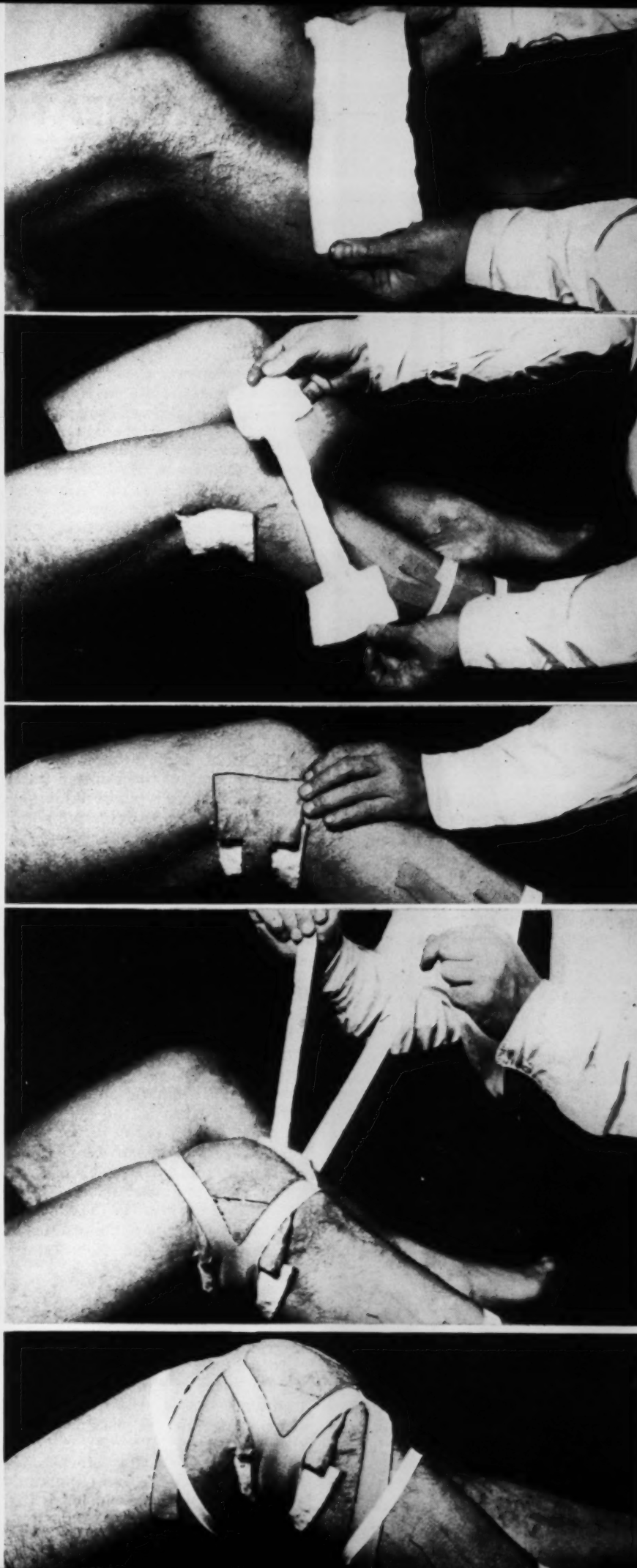
### Hips, Kidneys and Ribs

We do not use the ordinary type of hip pad which comes attached to the pants. Instead we use separate blocking pads. However, these are not of the standard type, and were specially constructed for us so that the fiber extends about two inches farther all around than they do in the standard pad. Thus the lower ribs and kidneys were given greater protection. The manufacturer accommodated us in this manner without any great additional

(Concluded on page 33)

### Right: Knee Strap

The knee is flexed slightly while this modified "Duke Simpson" bandage is being applied. The enlarged ends of the "I" shaped piece of felt furnish lateral support to the knee joint.





# BADMINTON—A CO-RECREATIONAL SPORT

By Carl Jackson and Lester Swan

The stroke that produces the overhead drop and high clear is essentially the same as the smash

This is the third and concluding installment of a series of three articles by Carl H. Jackson and Lester A. Swan of the Northern Evening High School (for adults) in Detroit, Mich. The authors have already covered grip and racquet position, holding the bird, the service, bird flights and the return, and the fundamental strokes. They conclude with the overhead and net strokes.

THE flights most commonly produced from the overhead stroke are the drop, the smash, and the high clear. As we indicated in the sections on bird flights, the well-placed smash is the severest weapon on offense. While we are concerned here specifically with the smash, the stroke used to produce either the overhead drop or high clear is essentially the same. The only difference in the case of the overhead drop is that the force of the stroke is checked just before the bird-racquet contact and is so gauged as to direct the bird just over and close to the net. The skillful player will usually introduce deception into the overhead drop by faking a smash. The overhead high clear differs in that the bird is hit upward.

Aside from the stroke itself, the important fundamentals to consider in the overhead stroke are the stance and the point of bird-racquet contact. A comparison of the early sequences of the forehand stroke with those of the overhead stroke indicate that the stroking stance for the overhead is the same as the on-guard stance—the left foot forward and pointing in line with the on-coming flight.

Since the smash and drop are rapidly descending flights, the bird must be hit downward. The bird-racquet contact point, therefore, should not be directly overhead but a little out in front. Furthermore, this point is such that the full reach of the arm and racquet are used. The full reach is essential for the power requisite in the smash stroke. To judge the contact point properly, the player must maneuver into position and carefully time the stroke. The common faults are in not getting far enough back of the bird or in letting it fall too low (improper timing).

It will be noted that the progressive action pictures of the overhead stroke begin with the player already in stroking position. The bird at this moment is high overhead and falling a little out in front of the body-line. The player is leaning back, with most of the weight on the rear foot

during the backswing. This allows for additional backswing and hence power in the stroke. It may be well to point out here that the power is applied with the upward movement of the racquet and not on the downward movement, a common error with beginners. Note in No. 4 that the racquet is allowed to drop perpendicularly behind the body.

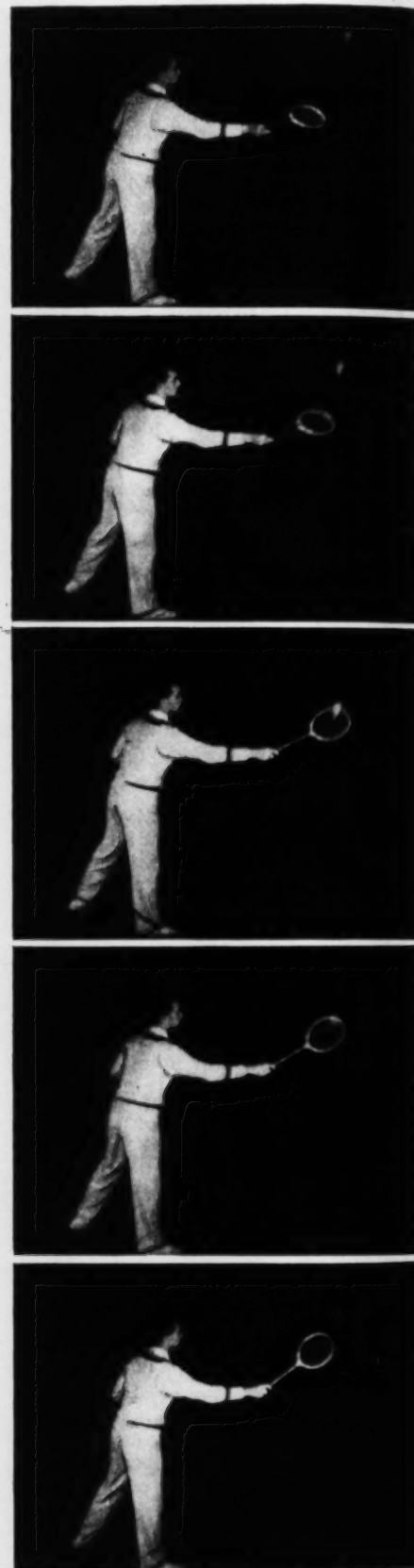
The force with which the bird is hit is indicated by the outstretched arm, by the fact that the rear foot is raised off the floor and by the lunge forward with the completion of the stroke (No. 7). But again, as in the forehand and backhand strokes, most of the power results directly from the flicking movement or wrist-snap. The wrist-lead necessary for the sudden withdrawal of the wrist is shown in Nos. 5 and 6.

## The net strokes

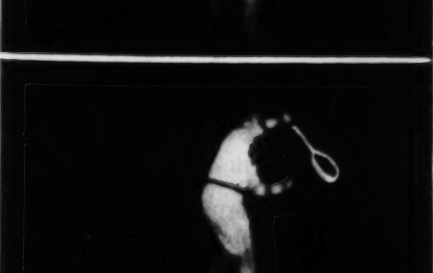
Net play is a relatively easy department of badminton and yet it provides much of the fun and thrills of the game. Two types of net strokes are illustrated in progressive action pictures—the lift stroke, where the bird is stroked down low; and a carefully gauged, high forehand (or backhand) stroke, where the bird is stroked near and directed along the net-tape (cross-net) toward the side alley.

Of course the cross-net as well as the short hairpin type of flight may be produced with the lift stroke, but where the player wishes to make a quick cross-net placement and the time element does not force him to stroke low, he should strive to meet the bird as close to the net tape as possible. A short flight, directly over the net, may of course be produced from near the net tape also. Variations between the short and cross-net flights for either of these strokes provide interesting opportunities for deceptive tactics, as for example, faking a cross-net flight from near the net tape and "dropping" the bird directly over the net. This and other obvious variations of deceptive play are relatively easy in net play.

It has been assumed thus far that the nearness of the on-coming bird to the net-tape, or the receiver's position, rule out the possibility of a rush to the net followed by a quick smash. However, the alert player will be watchful for an opportunity to rush and smash the bird that



Above: The Cross-Net



crosses the net at an upward angle or clears by a sufficient margin to permit a smash without hitting the net.

The choice between the left or right foot forward in the stroking stance at the net often will depend on the player's court position. Hence no definite rules are needed. Obviously, when stroking from the right side of the court, he is better prepared to cover the unguarded court area on his left, if his right foot is forward. On the left side of the court, the opposite holds true.

### Right: The Lift Stroke

In No. 2 of the lift stroke, bird-racquet contact is made with the racquet practically parallel to the floor. At the moment of contact the grip is tightened so as to provide a solid surface from which the bird may be delicately directed. The racquet movement of this stroke consists primarily of a "lift" rather than a pronounced movement from the wrist. The lift with a rigid wrist rather than a flexible wrist stroke is better suited to the accuracy required for the short net flight.

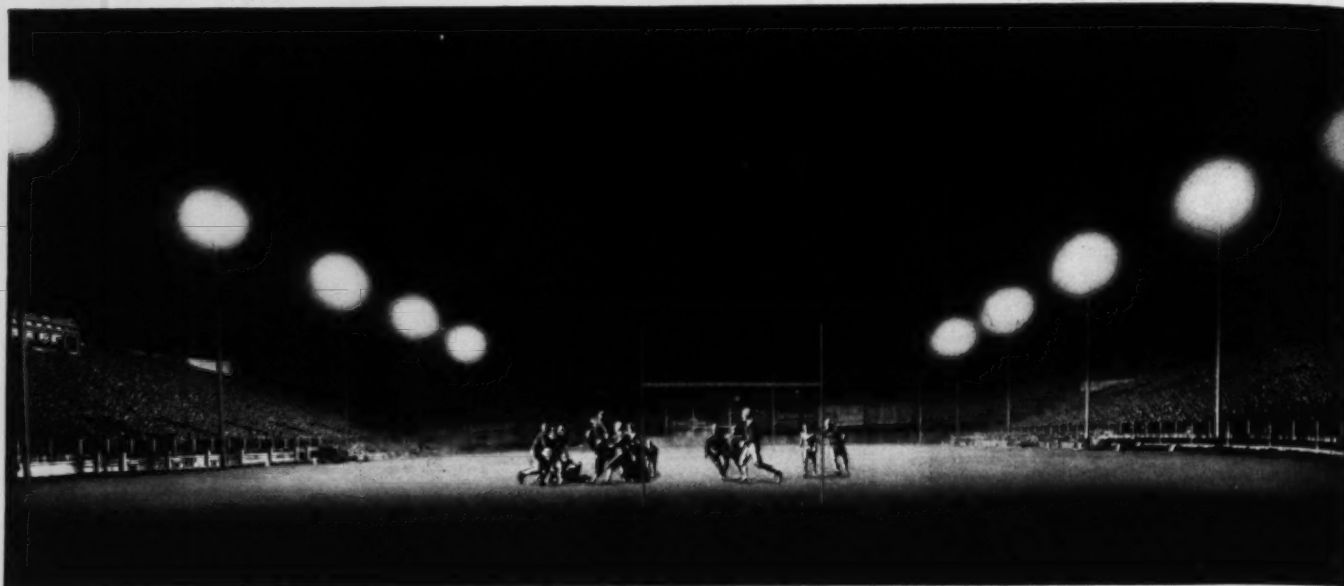
In the cross-net from a high forehand, the stroke is a short, gentle "gate-swing" from the wrist and partly from the elbow. Note in No. 1 that the racquet face is nearly flat, and not at right angles to the floor. This permits the player to "drop" the bird directly over the net if the situation calls for the short flight, and also disguises the player's intent.

### Left: The Smash

So far we have covered only the fundamental strokes. In addition to these every expert has a repertoire of special strokes for certain situations. Indeed, this is to some extent a measure of his skill. The "round-the-head" stroke is, in a sense, a special stroke but it is among the first to be acquired by the player advancing beyond the beginner stage. It is a necessary piece of equipment with which to cope with the fast flight directed to the left side and near the head or shoulder, when there is insufficient time to deal with it effectively by ordinary means.

In this stroke, the player bends from the knees, brings his racquet back to a point slightly below the line of his shoulders, makes a circular movement around his head with the racquet, and meets the bird directly overhead. An effective smash or high clear may be produced with this stroke. All head or shoulder-high flights to the left may be stroked in this fashion.





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## SURVEY OF FLOODLIGHTED FIELDS

By Gene Rose

Gene Rose coaches football at the Casey Township High School in Casey, Ill.

**S**INCE we are considering the lighting of our football field at Casey High School, we thought it advisable to secure definite information in regard to the success of other such ventures throughout the state and to the kinds of lighting systems used. With this in mind we sent out questionnaires to various schools throughout the state. Eighteen schools having lighted fields returned to us the information that follows. The following questions were asked:

1. How long have you had a lighted field?
2. Do you consider it a success?
3. How many lights on each side?
4. What power bulbs?
5. What type of reflector?
6. How many poles on each side?
7. Height of poles above ground?
8. What changes, if any, would you recommend in your set-up?

In regard to the first question as to length of time the schools have had their fields, the answers varied from one to nine years. The average length of time was five and a quarter years. None had abandoned their fields.

### Night football successful

The answer to the second question, as to whether night football was a success, brought an affirmative answer from every school. Of the eighteen answers eight merely stated yes, two suggested early fall games only, six considered it a success both financially and from the standpoint of interest, while two schools stated that lighted fields were a success only from the financial angle.

It was found that most schools use 1500-watt bulbs. Three schools re-

ported using 1000-watt bulbs while one used 750-watt bulbs. The average total watt power amounted to 51,222 watts. One school used forty-eight 1500-watt bulbs with a total of 72,000 watts, while one system—built in the early days—reported the use of only sixteen 750-watt bulbs totaling a mere 12,000 watts. Three schools reported using forty 1500-watt bulbs; two, thirty 1500-watt bulbs; one, forty-two 1500 power bulbs; four, thirty-two 1500-watt bulbs; two, thirty-six 1500-watt power bulbs; one, thirty-four 1000-watt bulbs, one school reported twenty 1500- and twenty 1000-watt bulbs, while one reported using twenty 1500-watt bulbs.

Five schools reported that they were using Giant type of reflectors, four the single porcelain type, two the Pyle Na-

tional, two the Benjamin type and one reported using glass reflectors.

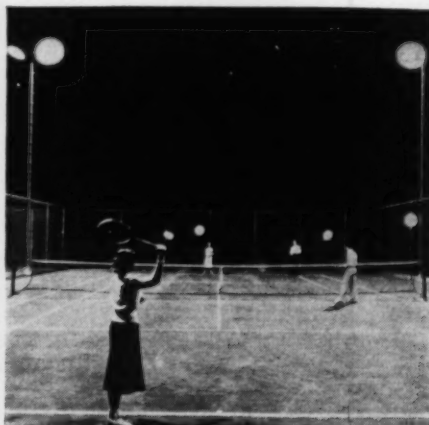
### Height of poles

The average height of the poles used was 50 1/10 feet. It was noted that most of the newer fields contained poles erected 52-60 feet above the ground. The oldest fields all reported the mistake of erecting poles too short for good diffusion of light. As to the number of poles, nine schools reported five poles on each side of the field, six reported four poles to the side, one three, one six, and one eight poles on each side of its gridiron.

Answers to the question as to what changes would they recommend were very interesting. One principal suggested using more 1000-watt bulbs as the 1500-watt lights created too much heat in the sockets. One athletic director suggested using four poles instead of five to the side. Two favored the closed type of reflector in order to keep reflectors clean and to safeguard against bulb breakage on rainy nights. Another principal suggested erecting the poles back of seats if at all possible, while one school executive recommended wiring so that part of the lights could be turned on at a time. One reported that smaller auxiliary lights over the bleachers were handy when the flood lights were turned out. One thought the single porcelain reflectors superior.

While we realize that this study is not as complete as it might be, we thought it would be of some interest to school officials throughout the state.

Schools reporting were: Monticello, Danville, Laurenceville, Palestine, LaSalle, Edwardsville, Decatur, Centralia, Urbana, Sparta, Mount Vernon, Mattoon, Champaign, Westville, Streator, Joliet, Kewanee, Kankakee, and Chester.



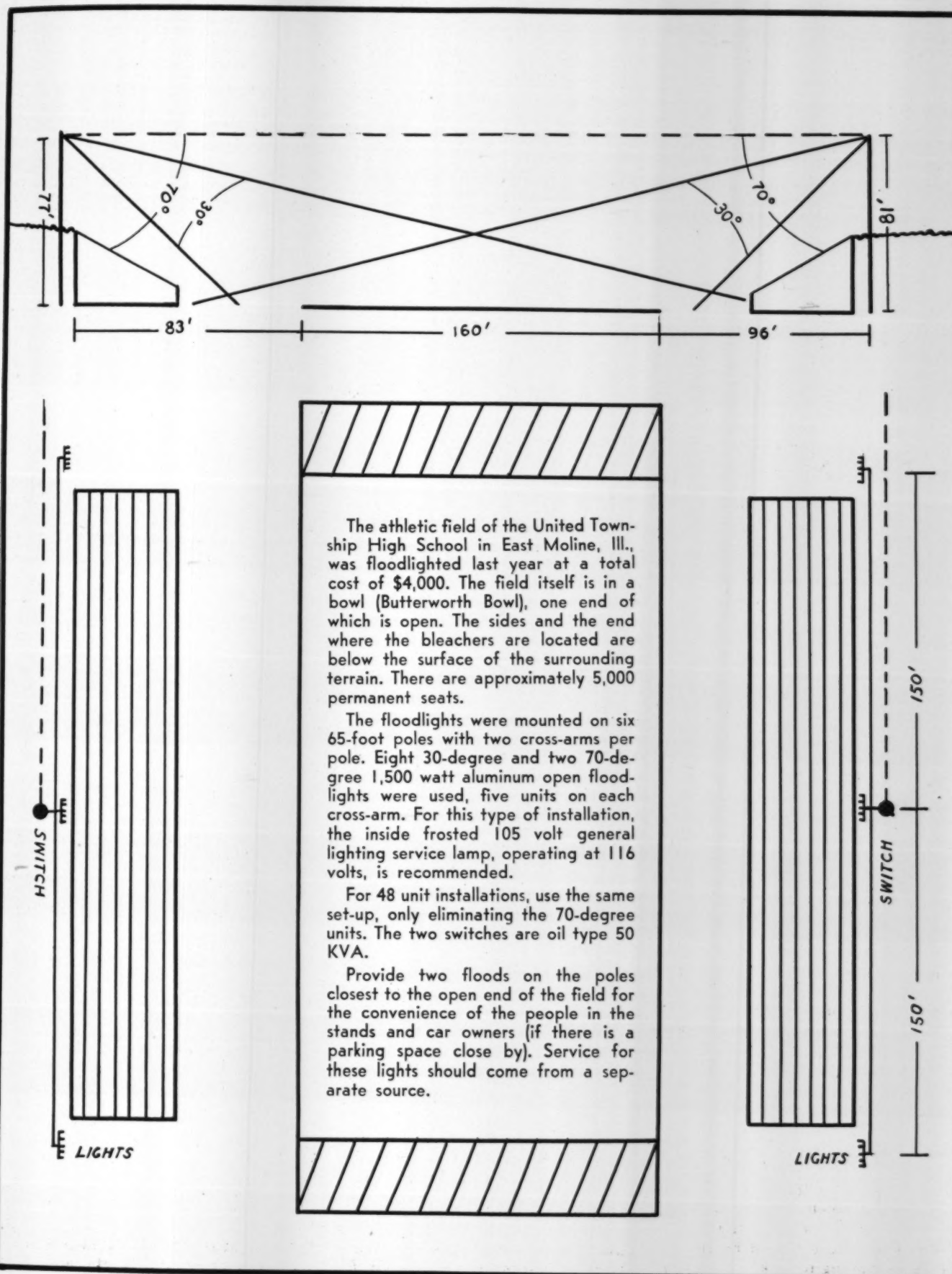
General Electric Co.

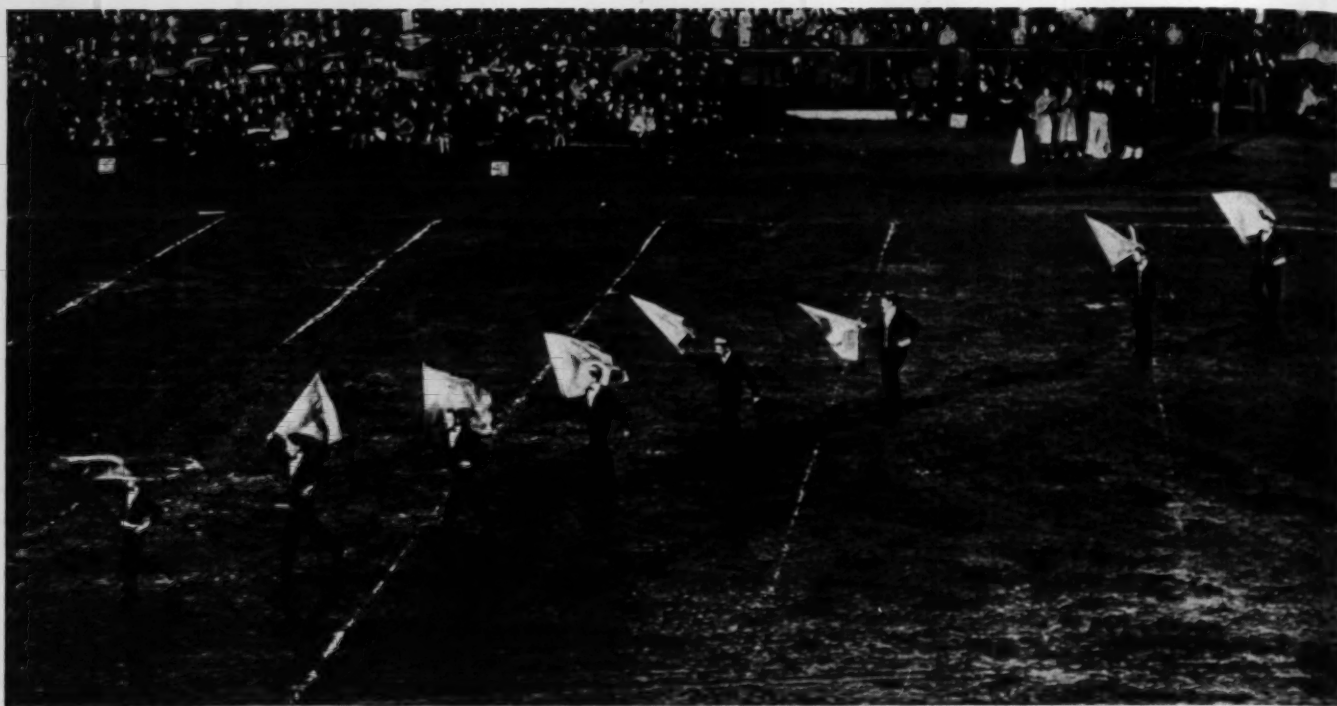
Not only have football, baseball and softball fields been illuminated for contests at night, but floodlighting systems are being installed in playgrounds, outdoor swimming pools and tennis courts. Above is one of the illuminated courts in Roxbury Park, Beverley Hills, Calif. The floodlights, mounted on 40-foot poles, have a total wattage of 6,000 watts per court.



# LIGHTING LAYOUT FOR BUTTERWORTH BOWL

United Township H. S., East Moline, Illinois





Despite a month of almost continual rainfall, Aberdeen High played its Thanksgiving Day football game on this firm, comparatively dry field.

## RAINPROOFING A DIRT FOOTBALL FIELD

By N. E. Nelson

"The game was played in the mudhole which we know as Stewart's Field," wrote the sports editor of the local paper after the last Armistice Day game of Aberdeen, Wash., High School. Yet, less than a month later, despite a rainfall of more than 25 inches—two inches of it on the day before Thanksgiving—the Thanksgiving Day game was played on a firm, comparatively dry field. It was due to no freakish accident that the field was in good condition for the game. N. E. Nelson of Aberdeen forwards the details of the engineering feat that transformed the "mudhole" into a well-drained gridiron.

**S**EVERAL years ago, in common with other high school and college fields of western Washington, the Aberdeen field was unusually muddy at the beginning of the season and by the end of the season a veritable morass. Several factors contributed to this condition. Most important was the rainfall of this area, which averages 83 inches a year and often goes over 100 inches. Another factor, and also important, was the fact that the field is composed mainly of clay. The more rain that fell, the muddier and stickier the field became.

To counteract the clay, common sand was spread over the field. The sand proved unsatisfactory from the players' standpoint because it was sharp and irritated the skin. Not only did the players dislike it, but there was difficulty in making the sand stay on the field. Several inches of rain would wash it out to the sidelines. Then there would be the expense of moving it back.

About six years ago there was

talk of a turf field but investigation revealed that a properly constructed field would entail a staggering financial outlay for a school of little more than 1,000 students. In his search for an alternative method of constructing a field, C. J. Powell, now superintendent of the Aberdeen schools, working with officials of a local construction company, discovered that river silt, dredged from the mouth of a nearby river, would be an ideal surfacing material. He found that the silt which is washed down from loam-covered hills, is so smooth and fine that it does not irritate the players' skin. Then, too, cohesion between the particles is relatively great so there is little trouble with erosion.

About 300 yards of silt were laid on the field during the first year. The greater part of it was worked into the clay with a spike harrow in order that the clay might become more firm. To put the silt on the clay without mixing would probably have led in time to muddy spots where the clay had come up and engulfed the surface silt.

Since then, no major repairs or alterations were necessary until last fall, and then only because the field had been used as a midget automobile race course during the summer and had been left in a deplorable condition.

However, the question of financing the repairs arose and it was not until after the Armistice Day game that the matter was settled. During the several weeks before Thanksgiving about 150 yards of silt were used on the field. Some of it was worked in with a har-

row and the remainder was spread over the surface and contoured with a drag.

The field is easily kept in condition. Several times during the season a simple drag (made from two short 8 by 10 inch timbers braced at an angle to each other) is hitched to an automobile and towed around the field. The only rule in dragging is to work always toward the center so that when the dragging is done, the crown of the field will be at least six inches higher than the sidelines.

When asked his opinion of the field, Jud Graham, Aberdeen coach, admitted he has a soft spot in his heart for turf fields, but added that he is more than pleased with the field as it is. In many ways, Graham believes it is superior to turf. Most of the games played in the Southwest Washington High School Conference are night games. The combination of dew and grass makes the ball rather slimy and hard to handle, a condition which is not experienced on the silt field. There is only one thing that causes Graham any concern. The silt is so fine that when the field is dry it is a virtual dust bowl. However, in case of a dry spell before a game, the coach has made arrangements with the street department to have flushing trucks on hand to wet the field.

To carry away the water, four-inch tile drain pipes are entrenched about 10 feet away from the sidelines. The trenches are filled with coarse gravel so that the water may easily get to the drain. Here the drains are sloped one foot in every 150 feet, but can be more or less, depending on the amount of water to be carried away.

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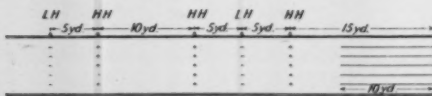
# Building the "Athletic Plant"

A short review of "The Athletic Plant" appeared on page 2 of the May Scholastic Coach. The following excerpts and diagrams have been taken directly from the book with special permission of the publishers.

**M**ANY schools and colleges now go without much necessary or helpful athletic equipment because they feel they cannot afford it. Lamar believes that there is no reason why much of this apparatus cannot be built in the school shop at a slight cost. In "The Athletic Plant," which is based upon the author's many years of personal instruction and observation of all types of fields and equipment, he shows how it can be done, giving assembling plans, lists of materials and helpful drawings and illustrations.

Lamar covers practically every sport, both winter and summer, indoor and outdoor. Full chapters are devoted to night lighting for play areas, sound installations and their uses, and suggestions and ideas for bleacher construction.

In a chapter on track and field, Lamar states that a poorly conducted meet on the part of the home team not only disgusts the visiting team but also causes a lack of interest in the spectators toward future meets. The success of well run off meets depends upon proper organization.

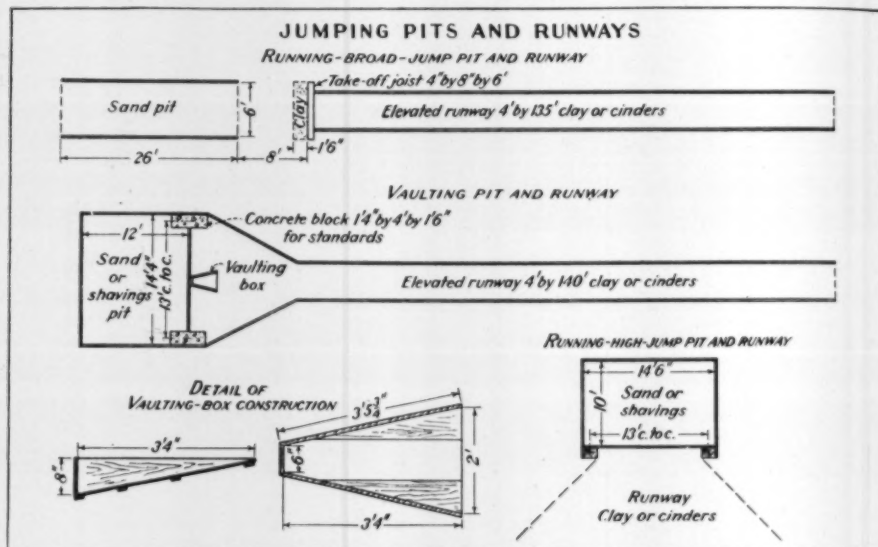


**Diag. 1** illustrates a simple method which takes but little time and is well suited for laying off lanes for the less important meets. The lines indicating the lanes for the first 10 yards are put in solid. A long stick may then be used for putting in marks at points where low and high hurdles are to be set up at certain times. The stick should have

marks on it spaced at distances indicating the width of the lanes. By laying this stick flat on the track and perpendicular to the curb at points where markers indicate a low or high hurdle, it is very easy for one man to sprinkle a little slaked lime by hand. The diagram shows single lines parallel to the curb opposite low-hurdle markers. These marks not only indicate where hurdles are to be set but also divide the track into lanes.

quite simple. One must bear in mind, however, that outer lanes like, 2, 3, 4, 5, and 6 are measured 8 inches from the inner edge, while lane 1 is always measured 12 inches in from the inner edge. This difference makes a slightly greater handicap for lanes 3, 4, 5, and 6 over lanes next to the inside.

For example, in working out handicaps for a curve divided into 48-inch lanes, the handicap for lane 2 over 1 will be 11 ft. 6 1/4 in., but the handicap



Diag. 3

A table for laying off handicaps on semicircular turns is shown in Diag. 2. These stagger distances are quite accurate for regulation sized tracks whose length is determined by measuring along a line 12 inches in from the inside curb. The lanes must also be marked at regulation width, using 30-, 36-, 42-, or 48-inch margins.

The table shows the handicaps for six-lane tracks. The method of working out a handicap for lane 2 over 1 is

of lane 3 over 2 will figure to be 12 ft. 6 1/8 in. The diagram gives a method for working out handicaps, or staggers. For championship meets, where there is a possibility of new records being made, it is advisable to have a competent engineer measure the track and mark the staggered distances for all lanes.

Lamar recommends a running broad jump pit of at least 26 feet long and 6 feet wide. The depth of this pit before it is filled with a good beach sand should be at least 18 inches. The side walls of the pit should be made of wooden planks 26 feet in length. Old rubber hose, firmly nailed, will serve to protect the upper edge of these planks.

It is advisable in constructing your own take-off board to have it as wide as your landing pit. The specifications for a take-off board call for a joist sunk flush with the ground, the outer edge of which is the scratch line. A satisfactory runway need not be more than 4 feet wide and 135 feet long since most broad jumpers develop their speed in a run not exceeding 120 feet. The runway should be built up one inch above the ground level, by using planks from 6 to 8 inches in width. The space between these planks may be filled with clay or cinders.

**Diag. 2**

**CHART FOR LAYING OFF HANDICAPS ON SEMICIRCULAR TURNS**

"Stagger" for 48-in. lanes on 1 turn

Lane	Stagger for 1 turn	Stagger for 2 turns	Stagger for 3 turns	Stagger for 4 turns
1	0	0	0	0
2	61' 9 1/2"	123' 7 1/2"	185' 5 1/2"	247' 3 1/2"
3	49' 2 1/2"	98' 5 1/2"	147' 9 1/2"	196' 11 1/2"
4	36' 8"	73' 4"	110'	146' 8"
5	24' 1 1/2"	48' 2 1/2"	72' 3 1/2"	96' 4 1/2"
6	11' 6 1/2"	23' 1 1/2"	34' 8 1/2"	46' 1"
7	0	0	0	0

All other lanes measured 8" inside  
Lane next to curb measured 12" inside

"Stagger" for 42-in. lanes on 1 turn

Lane	Stagger for 1 turn	Stagger for 2 turns	Stagger for 3 turns	Stagger for 4 turns
1	0	0	0	0
2	53' 11 1/2"	107' 10 1/2"	161' 10 1/2"	215' 9 1/2"
3	42' 11 1/2"	85' 10 1/2"	128' 10 1/2"	171' 9 1/2"
4	31' 11 1/2"	63' 10 1/2"	95' 10 1/2"	127' 9 1/2"
5	20' 11 1/2"	41' 10 1/2"	62' 10 1/2"	83' 9 1/2"
6	9' 11 1/2"	19' 10 1/2"	29' 10 1/2"	39' 9 1/2"
7	0	0	0	0

"Stagger" for 36-in. lanes on 1 turn

Lane	Stagger for 1 turn	Stagger for 2 turns	Stagger for 3 turns	Stagger for 4 turns
1	0	0	0	0
2	46' 1"	92' 2"	138' 3"	184' 4"
3	36' 7 1/2"	73' 3 1/2"	109' 11 1/2"	146' 7 1/2"
4	27' 2 1/2"	54' 5 1/2"	81' 8 1/2"	108' 11"
5	17' 9 1/2"	35' 7 1/2"	53' 4 1/2"	71' 2 1/2"
6	7' 4 1/2"	16' 9"	25' 1 1/2"	33' 6"
7	0	0	0	0

"Stagger" for 30-in. lanes on 1 turn

Lane	Stagger for 1 turn	Stagger for 2 turns	Stagger for 3 turns	Stagger for 4 turns
1	0	0	0	0
2	38' 2 1/2"	76' 5 1/2"	114' 7 1/2"	152' 10 1/2"
3	30' 4"	60' 8 1/2"	91' 1 1/2"	121' 5 1/2"
4	22' 6"	45' 1 1/2"	67' 6 1/2"	90' 1 1/2"
5	14' 7 1/2"	29' 5 1/2"	43' 11 1/2"	58' 7 1/2"
6	6' 8 1/2"	13' 7 1/2"	20' 4 1/2"	27' 2 1/2"
7	0	0	0	0

SOLUTION FOR WORKING OUT HANDICAPS  
Radius Y: 2 x 3.1416 = 2  
Radius X: 2 x 3.1416 = 2  
Handicap-lane 2 over 1 for 1 turn

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Style R above—The oldest shoe in our line. Used as an all-round shoe for practice and games by many of the country's leading teams. Light, yet very tough and comfortable. Comes equipped with No. 4 cleats. Goodyear welt construction. Hard or soft toe. School Price \$9.50.

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Style X—A very sturdy shoe. Made throughout of a good grade of Athletic Tan leather. Soles are of good Oak leather. By all odds, the best shoe made within this price range. Has No. 1 cleats. Goodyear welt construction, nine eyelets high. Hard or soft toe. School Price \$5.50.

Cleats—14 per set in bag. Numbers 1, 2, 4, 5 1/2, 6, 12—50c per set. Numbers 3, 6 1/2, 7—60c per set. Number 9—75c per set.

Note: Complete stock in D and E widths. Others on order.

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# ON THE PLAYING FIELDS OF ENGLAND

By J. B. Hardy

In England the higher the social standing of a school, the larger looms the importance of its sports program

J. B. Hardy's article on English sports is the second of a series on sports in foreign countries. The first, "Organized Sports in Russia" by Gerald G. Reed, appeared in the March Scholastic Coach. Hardy is a retired headmaster and games master now living in Worcestershire, England.

**T**HE sporting instinct of the English is traditional. Rich in sports heritage, they place great stock in their playing fields as a laboratory to develop good manners, poise and a sense of fair play. The youth of the nation are afforded ample opportunity to participate in sports, especially outdoor ones, in the three main groups of English schools—Elementary, Secondary and Public.

Elementary Schools are free schools for children up to 15 years of age which are compulsory for all children to attend unless their parents can prove that their charges' education is being properly administered in some other manner, either in a school or privately.

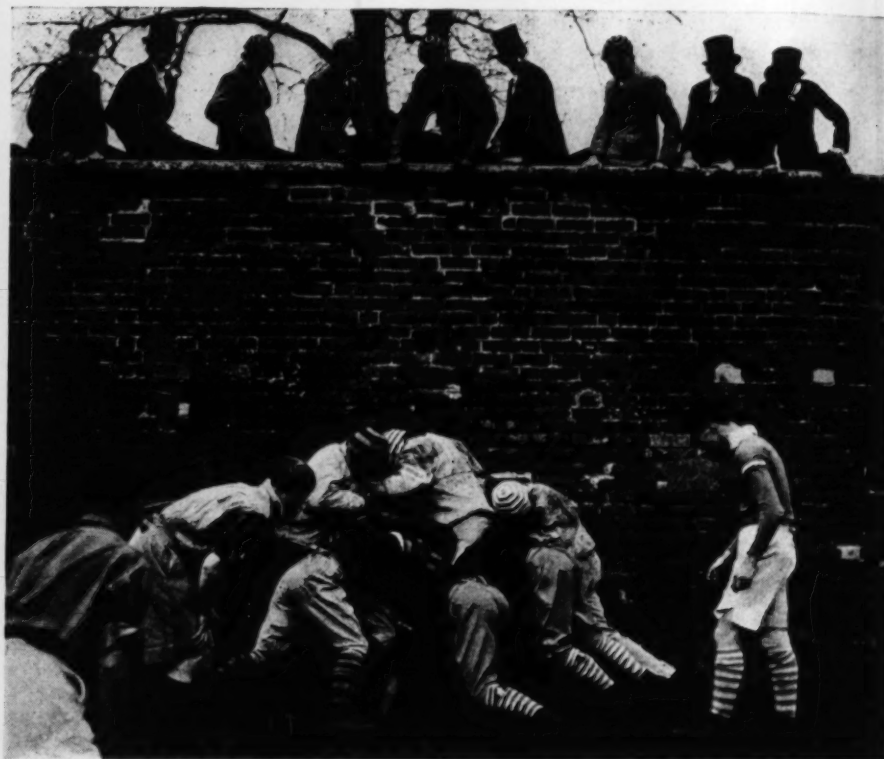
The majority of students in the Secondary Schools come from Elementary School. The pupils average between 11 and 19 years of age and are prepared for University or Technical College. These schools are not wholly free, a scale of fees being fixed by the administration. The fees are never more than a small proportion of the total cost of the education.

## Oldest schools

Oldest in origin and most powerfully rooted in tradition are the Public Schools, which are equivalent to the privately endowed preparatory schools of America. They open their doors to students of about 14 years of age and the fees are very heavy, amounting to 200 or 300 pounds a year (about \$1,000 to \$1,500 in American money). Almost all of them are residential schools and outside the state plans and subsidies for education. The Secondary Schools, mostly day schools, try to pattern themselves as much as possible after the Public Schools.

In addition to these three types, there are all sorts of private schools run for profit and supervised by the state just enough to satisfy the public that these schools are giving a fairly satisfactory education. Among this group are Preparatory Schools which ready the pupils for entry to the Public Schools.

The most outstanding characteristics



Eton's famous Wall Game: Nobody but the players really understand the game, the object of which is to force the ball into a goal at end of wall. No true goal has been scored in 30 years.

of the English Public Schools are their devotion to: (1) Sports, (2) Classics and Mathematics. Sports stand first. Was it not the Duke of Wellington who said that "The Battle of Waterloo was won on the playing fields of Eton?" There is no doubt that the English Public Schools have had more influence on English sports than any other institution, especially in the early development of sports.

In a Public School the pupils reside in Houses, each under the control of a Housemaster and mixed as to ages. That is, each house includes boys of all the ages represented in the school. The Housemaster is their guardian and advisor, and is responsible for their welfare and progress.

The House forms a complete group for games and sports. Matches, football and cricket chiefly, are organized between the Houses which have their junior and senior and first and second teams. The pick of the House athletes form the school teams. All the schools have large and well cared for playing fields and sports pavilions so that many matches can be played simultaneously if necessary. Most of the games are intramural in nature. The school teams, however, play other Public School teams and occasionally University and County teams. The Oxford and Cambridge rowing, football and cricket teams are made up mostly of Public School athletes whose feats at school were well known.

The same type of program is followed in the Secondary Schools, though not to the letter since most of these schools are non-residential. However, they are often divided into "Houses" in much the same way, the groups playing against each other. They also have school teams chosen from the best group athletes and play other Secondary Schools that are near enough to make the arrangements convenient. The Secondary Schools all have, as a rule, a gymnasium and a playing field of about ten or twelve acres.

The Elementary Schools usually have no playing fields. They play their games on any nearby sports ground or field that can be borrowed. In spite of their lack of opportunities, they often have excellent junior teams in all sports. The schools also play each other, sometimes in regularly organized district leagues. Both teachers and pupils are enthusiastic and get splendid results with little or no facilities.

As a rule, each type of school keeps in its own class for competitive games, although junior Secondary teams may play Elementary teams occasionally. In England the higher the social standing of a school, the larger looms the importance of its sports activities. Of course there are exceptions, depending on the school's administrators.

It is characteristic of the English system of education that except in fi-



nancial matters and any kind of propaganda, the activities of a school, including the curriculum, are entirely in the hands of the Headmaster or Headmistress and the teachers.

### General sports picture

Cricket is the favorite summer game, the cricket season usually extending from May to September. It requires a large field and can only be played on grass in warm and dry weather. A wet cricket field makes it almost impossible to control the ball. The rules are very definite and familiar to everybody. It is a quiet, orderly game—the bowler trying to break the wickets defended by the batsman. The batsman is "out" if the ball breaks the wicket, if it is caught from the bat by one of the fielders or if the wicket-keeper can break the wickets with the ball, secured while the batsman is running, after a hit and before the runner has reached the wicket. A long hit by the batsman, a clever catch by one of the fielders, a skillful ball by the bowler which eludes the bat and either breaks the wicket or results in a catch—are enthusiastically applauded.

The two varieties of football are soccer or association football and rugby football. Rugby originated in Rugby School. (For a description of the game, see Clyde Williams' article, "Rugger—Everybody on Their Own," in the March Scholastic Coach.)

Rugby is the favorite game in certain parts of the country, such as Wales, and is played in all the Public Schools. Association or soccer is most popular in Elementary, Junior and perhaps the majority of Secondary schools. In a school I had in Wales—pupils from 14-18—Rugby was the only type of football played. In my school in Durham, pupils of the same age, only soccer was played. The distribution of the two forms of football has no relation to any class; it is a matter of local preference.

Some Headmasters will not allow pupils under 17 or 18 years of age to play rugby. They consider it too strenuous and too much of a strain on the heart of the growing boy. I had a Headmaster colleague, an international rugby player in his day, who firmly believed that it was a harmful game for young boys. He himself had a strained heart from his football days, and died very suddenly from it.

### Tennis is optional

I think tennis holds almost exactly the same place in our schools as in America's. It is optional and a pastime. In my school, a tennis tournament was held by the upper forms and staff each year at the end of the summer term. As far as I know, baseball is not played in this country. I know of no schools which include it in their sports program. Basketball is a favorite girls' sport. Swimming and rowing are favorite sports where there are large enough bodies of water, but the uni-

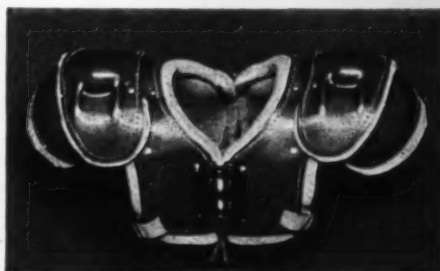
versal games are cricket and football for boys and field hockey for girls. Generally the summer term—Easter to July—is the period of training for sports. The practice hours are similar to those of American athletes—from four to five or six o'clock, weather permitting.

While baseball, long considered America's national pastime, apparently is losing some of its popularity in the United States, cricket still retains its unshakable hold on the English. Sports may come and go but in England every town, village and school will always have their cricket team. The expression, "It is not cricket," is a traditional reproach to the individual who has taken an unfair advantage of another person by word or action.

All Public, Secondary, Private and many Elementary schools have a Sports Day, generally in June, when all types of field sports and games are played in competition for prizes, or just for the fun of it. In one of my schools, there were no individual prizes. The groups and teams fought for cups or shields which were exhibited during the year in some prominent part of the school.

Gymnasiums are almost universal in Public and Secondary schools, but not in Elementary Schools. Pupils are usually given two hours of physical culture a week. The large, important schools have resident or permanent members of the staff for this purpose. Smaller schools share a teacher between two.

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# FINANCING AN ATHLETIC PROGRAM

By William Healey

William Healey, a coach at the Sycamore, Ill., High School, forwards his suggestions on how to raise money for the athletic department and how to budget the funds.

**T**HE amount of money required to finance an athletic department is larger than for any other extra-curricular activity. When conditions are good and money available, a generous appropriation of funds is committed to the athletic department. But when finances are low this department is one of the first to be hit.

This inconsistency stresses the need at all times for a program that will save money through careful planning and expenditures. And since the foundation of any efficient administration or any administrative organization depends on its method of budgeting and financing, the first step for the athletic department should be the adoption of a system of planned spending.

The purpose of the budget is to keep a balance between the income and expenditures, and to spend the money where it is most needed. In planning an athletic budget, the individual must be thoroughly acquainted with the financial background of the department. He must know what has been spent in the past, what is being spent in the present, and from this make an estimate of the expenses for the future. After this skeleton has been outlined, he may evolve the budget.

## ***Coach must estimate needs***

The coach should first be consulted. Without economizing too greatly, he should estimate what is needed, figuring just what the expenses will be for repairs, care of equipment, insurance, etc. Good equipment should be purchased, not necessarily the best, but equipment that will stand up well. The combination of good equipment and careful preservation will pay dividends in the long run, because it not only saves money but encourages thrift on the part of the athletes. Players will take better care of good equipment and will also feel more confident while wearing it.

The average budget should consider the following items: publicity, medical attention, insurance, permanent equipment, repairs, supplies, and transportation. The outlay for new equipment need not be too great

**The purpose of the budget is to keep a balance between income and expenditures, and to spend money where it is most needed**

## A STANDARD BUDGET FOR SCHOOLS OF FROM 300-600

### Four Sports

Item	Football	Basketball	Baseball	Track
General Equipment*	\$525	\$325	\$112	\$ 86
Trips	270	170	77	88
Awards	27	25	4	36
Printing	32	25	—	—
Maintenance	46	—	—	—
Scouting	9	—	—	—
Rentals	—	121	—	—
Medical	83	23	—	—
<b>Budget</b>	<b>\$992</b>	<b>\$689</b>	<b>\$193</b>	<b>\$210</b>
<b>Total—\$2,100.</b>				
Per cent to each sport	46%	35%	9%	10%

\*Includes: balls, jerseys, pants, pads, socks, shoes, helmets, officials.

if the equipment has been kept in good shape; some new equipment should be added each year.

## ***Sources of income***

The chief sources of income which contribute to the support of the high school athletic program include: board of education, ticket sales, pool of funds derived from all extra-curricular activities, donations, plays and entertainments, general organization dues, department of physical education, profits from magazine subscriptions, and candy sales. Other means of raising money are: school plays, carnivals, minstrel shows, or circuses. Also: sale of programs, advertising, tickets, tags, work day plan, "pep cup" or beauty contests, town cook book plan, movies, raffles, and professional entertainments.

A "pep cup" contest is based upon the sale of season tickets by classes, with points awarded depending upon the type of ticket sold. A "pep cup" is presented to the class making the most points.

Tickets sales may also be stimulated by the "athletic queen" idea. Each class may nominate two candidates for the honor. Each all year, season or single admission ticket bought or sold counts for votes on a graded scale toward the ultimate choice of the "queen." Votes are counted daily and the standings tabulated on two large thermometers, one in town and the other on the bulletin board at school.

The weekly ticket sales plan is another good method of raising money. Student activity tickets for the week are sold for five cents apiece and include (a) football, (b) basketball, (c) baseball, (d) track, and (e) the school paper. Ten-cent tickets are also sold, and in addition to the items named above they include: (a) the year book, (b) one concert or lecture, (c) three local concerts. This plan is suited to either a large or small high school. A folder is issued at the opening of the term by the home room teacher to each pupil who buys a five-cent ticket. Each home room teacher sells these stamps, which are pasted into the folder. In many cases the students buy all of their stamps in advance.

The "work day" plan requires a one-day vacation for the pupils who spend the day working at all odd jobs they can find.

## ***Activity tickets***

Some schools depend largely on the money they take in at the gate to finance the athletic program. Other schools, however, do not wish to depend on a single game and organize campaigns in which season tickets are sold to as many students as possible. In this fashion, they are sure of a certain income even though these tickets are offered at bargain prices.

Some of these tickets allow the owner to attend all school activities, while others allow him to attend only athletic events. The season



ticket plan is generally successful and usually enough money is taken in early in the year to make possible a budgeting of funds.

The activity ticket plan is a more extensive application of the season ticket idea. At the beginning of the school year, each student purchases an activity card for \$3.50, fifty cents of which is a locker fee. Lockers cannot be obtained unless the ticket is bought. This amount furnishes the funds which are budgeted to the separate activities. A certain amount is allotted to each activity for the year, the amount determined on the basis of what the activity cost in former years. In case a department desires to have its budget increased, the department must present its claims to the student board of control.

If an activity makes money during the season, and sports generally do, the profits go back to the general fund to be used for the support of other sports. If sports show a loss, in no way is the program of any non-athletic activity curtailed or is any money deducted from its allowance to be used for the support of athletics.

Many schools are successfully operating under this plan. If the student cannot pay the entire amount at once, he may pay at the rate of ten cents a week, the collection to be made on a designated day each week.

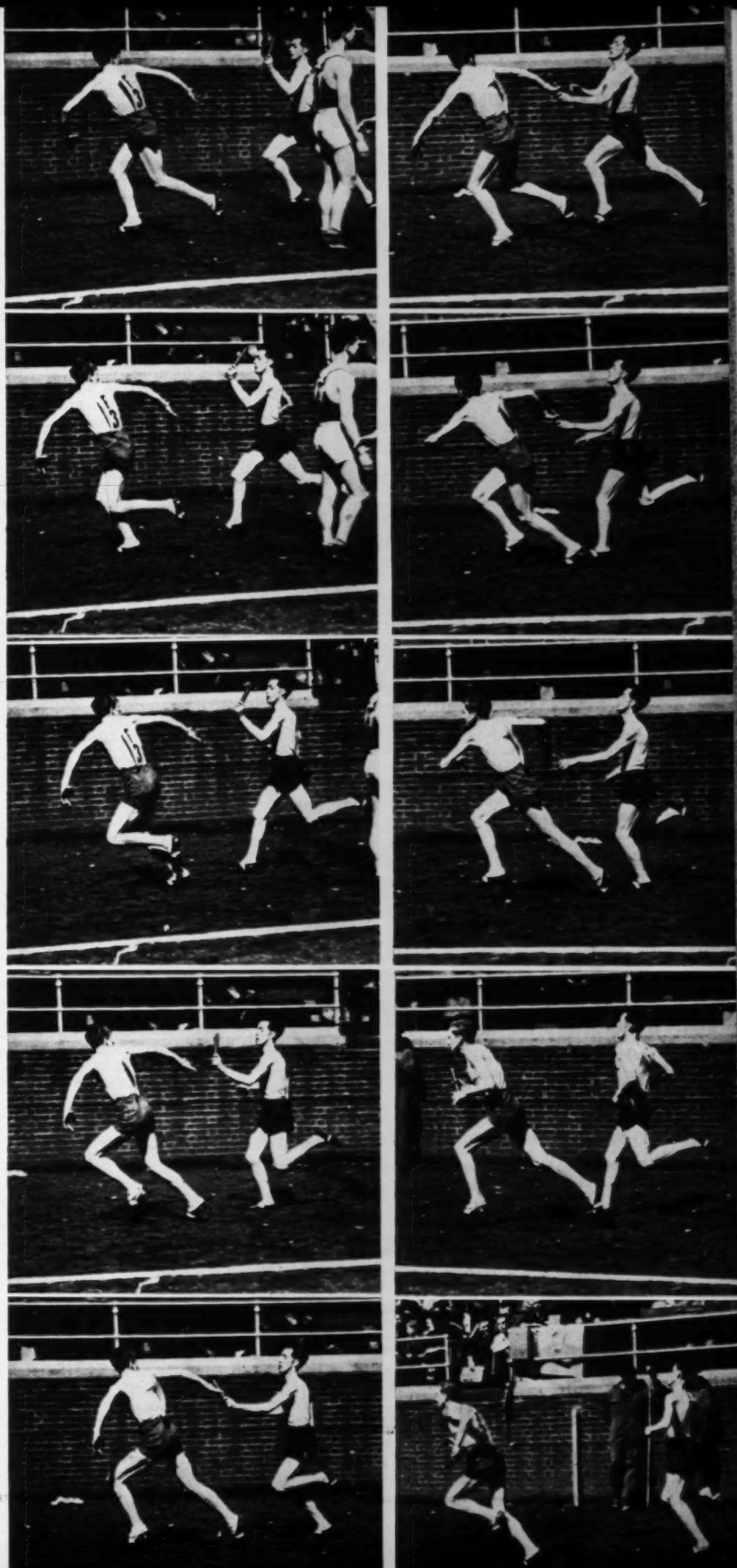
## Slap-Down Pass

There are swifter methods of transferring the baton than this slap-down exchange, but the slap-down is perhaps the safest way to pass the baton to the relief man. And when your quartet is as far out in front as the team in the pictures, safety rather than speed should be the keynote of the pass.

The receiver waits for the oncoming runner with the right arm extended back and slightly below the plane of the shoulder, both palm and elbow up. He has his eyes focused on the baton even while he is taking his preliminary strides in the passing zone. In these early strides, the relief man should attempt to gauge the speed of his teammate so that the pass will be completed with both men running as close as possible at equal speed.

As the oncoming runner approaches the relief man in the second picture, he has just completed a stride with the right leg and the left arm (holding the stick) is ready for the slap down. In the following sequence of five pictures, the passer synchronizes the stride of his left leg with the transfer of the baton from his left hand to the relief man's right. Without breaking stride, the receiver quickly switches the stick to his left hand. The baton is grasped well up on the farthest end so that the relief man will have ample surface to grip when he transfers the stick to the left hand during the first stride.

In the common method of passing the baton, the stick is usually transferred with a slight upward thrust, both the passing hand of the oncoming runner and the receiving arm of the relief man being fully extended. (For this type of pass see the progressive action pictures on page 9 of the March Scholastic Coach.)





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## New Books on the Sportshelf

**A MODERN PHILOSOPHY OF PHYSICAL EDUCATION.** By Agnes R. Wayman. Pp. 231. Illustrated—photographs and diagrams. Philadelphia: W. B. Saunders Company, 1938. \$2.25.

**T**HE book suggests that a point of view and a philosophy is necessary for the teacher to use intelligently the material available in the field of health and physical education. Also, how to use that material in the light of a changing social and educational philosophy. Although written with special implications for girls and women, this book is applicable to all (male and female) situations, scholastic, or club work.

Part 1 presents the underlying philosophy and principles, beginning with significant social trends, in the changing world. Today, we live in a "tuned up" and "wound up" world, which carries both good and bad significance. Physical education has become one of the balance wheels of civilization, and must see its problems in relation to the society in which we live. The emphasis in education has shifted from subject matter to the individual. In physical education, where once the emphasis was on the values of the field as a therapeutic agent, it is now on the broader implications of education. The by-products of activity, such as habits, appreciations and attitudes, have become more important than that of skills.

Part 2 concerns itself with implications and interpretations. The program should measure up to certain definite criteria and be built upon the needs of the individual, as indicated by tests, measurements, examinations, questionnaires, and student conferences. We can have progress only as we have measurement and profit by it. There is a very definite trend away from team games and toward activities which the student can use in leisure time. The final criterion of a program is that it fills the needs of the students for which it is intended.

HYMAN KRAKOWER

**SWIMMING POOL DATA & REFERENCE ANNUAL** (Vol. 6, 1938). Edited by Earl K. Collins. Pp. 220. Illustrated—photographs and diagrams. New York: Hoffman, Harris, Inc. \$2 (U.S.A.); \$3 (Foreign).

**T**HIS voluminous, 12 by 9 in. paper-bound book covers almost every conceivable phase of swimming pool construction. Printed on heavy gloss stock and having a magazine layout, it contains about 40 articles on such topics as detailed construction costs, sanitation, air conditioning of bath houses and pool rooms, layouts and operation costs, pool engineering and design, sterilization of swimming pool water, recirculating systems, etc.

In addition, there are a group of articles on the technical phases of swimming. These include mechanics and

judging of fancy diving, swimming stunts, how to instruct the blind to swim, and building business with water pageants. The book is illustrated profusely with both photographs and detailed diagrams. It is an authoritative work and swimming men in the country can make good use of it as a reference.

**ATHLETIC INJURIES** (*Prevention, Diagnosis and Treatment*). By Augustus Thorndike, Jr., M.D. Pp. 208. Illustrated—photographs and drawings. Philadelphia: Lea & Febiger. \$3.

**D**R. THORNDIKE has been a surgeon in the department of hygiene at Harvard University for the past six years. In his book, he presents as clearly and concisely as possible the problem of prevention, diagnosis and treatment of injuries received in sport. The finished product merits a place on the sports shelf of every trainer, coach and athlete. It is exceptionally well written and illustrated, dealing almost exclusively with athletic injuries and treatment including protective bandaging, taping, braces, etc.

The book has been arranged in three sections: the first, dealing with the prevention of injuries and the factors incident to this; the second, the types of injuries received in sport and their pathological nature; and third, the more common injuries occurring in various parts of the body and their diagnosis and treatment.

The type and organization of the illustrations are excellent. Many of the more common athletic injuries are shown in photographs and often supplemented by roentgen-ray (X-ray) pictures of the injury. For follow-up work, the text contains a group of drawings which show graphically how to bandage injuries. It is a simple matter to follow the method of bandaging since each strip of tape is numbered in sequence. Included are several of the bandages made famous by such men as "Duke" Simpson, Major Frank Wandle of Yale and J. M. Cox of Harvard.

In a chapter on physical training, Dr. Thorndike lists what he believes to be the four main features of such a course: diet, sleep, graduated muscular exercise and the absence of all drugs. He has found that a diet of 5,000 to 6,000 calories is necessary in football and crew and somewhat less for other sports like track, baseball and hockey.

It is interesting also to observe that the Doctor subscribes to the theory that certain athletes are "born" and that others are not. He attributes this to the fact that these athletes have a better coordinating mechanism, particularly in the control, voluntary as well as reflex, of the central nervous system over muscular activity.

He does not believe in the so-called "athlete's heart" for the reason that the athlete's heart is increased in size and musculature directly in proportion to the size of his skeletal muscles.

OUR column is named, and I like it. No doubt by this time the eyes of the good citizens of Williamsport are being knocked out as they behold Jeanette Fuller parading in the Lily Dache that her check made the first payment on.

Mrs. Dewey Stabler, whose husband was a coach before he became superintendent at Lawton, Mich., wrote me that, privately, she thought the column should have been named, "You should have played it this way, dear." Have any of you ever heard that one before? Automobiles aren't the only things that you can drive from the back seat. I suppose some wives are utterly indifferent to the tribulations of Mr. Coach. Certainly those who have written me aren't. I think a coach's wife probably is just as hurt and a whole lot madder when an athlete quits or does something else to betray the trust put in him.

Some of our "driving" is done from the sidelines instead of the back seat. What do you say when some game spectator says, "Why did he put Zilch in there?" or "Why isn't he playing Joe Goop?"

I am surprised that no one has written to take up the cudgels in behalf of the merits of her spouse. I thought I'd get some air mail replies on that one. I'm afraid Mr. Tony is going to go complacent on me if some of you don't write quickly and list such an imposing array of your husbands' duties and responsibilities that it will make my

## Says the Coach's Wife

If you have something for this column, send it to Mrs. Louise Matulis, Box 90, Davison, Mich.

husband appear idle in comparison.

**S**PEAKING of good husbands — if any of you have the idea that you are something extra-special in the way of a wife, a sort of *rara avis*, you should peek into my mail, and you'd have to admit that there are plenty of others in the same category. It would bring a sparkle to the eyes of Dorothy Dix herself to hear from the good wives who have written me. "For five years I have constantly been trying to create a friendly feeling between the team and myself"; "I can diagram plays, tell how to treat an injury, and know how to cheer up the coach"; "I want to aid or assist him through every season, through every defeat or victory, patiently and earnestly, to the best of my ability"; "It is the aim of every coach's wife to help her husband with his job, and believe me, it is a twenty-four hour one." These are some of the comments that have come in. And if you aren't that kind of wife, shame on you!

An Iowa coach's wife inquires: "Did you ever go personally to an ineligible player? Talk to him like a big sister?"

I have many times. First thing I knew he was playing again." I don't know if I've done just that, but many is the ineligible player I have coached in his studies until his work was up again.

A coachess from Pennsylvania brings up the question of creating a friendly feeling between the team and the coach's wife. She says that it has taken her five years to get the reaction she wants, but that this year they stop and talk or drop in at the house. It makes for a happier feeling all around, she says. I think she is absolutely right. I see to it that the boys will talk confidentially with me, and it helps both of us to understand a lot of things that happen. If it's something that really mustn't go any farther, I see that it doesn't. I think they do talk freely because they know I won't betray their confidence. Mrs. Paul Grein, the pretty wife of the Flushing, Mich., coach, is called "Maw" by the boys. They are always ready to help her, even to do some canning for her; I call that the height of helpfulness.

Mrs. Judson Hyames, wife of the director of physical education at Western State Teachers College, Kalamazoo, Mich., has just returned from a trip that is something to shoot at. Down through Tennessee and into Georgia to Atlanta they went. Why can't all phys ed men get assignments like that one? There would be one big rush of applicants for the positions of coaches' wives.

"MRS. TONY"



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*Schools are urged to buy the brands advertised in Scholastic Coach. The support of Scholastic Coach by its advertisers merits in turn your support of their products.*

## ARCHERY EQUIPMENT

The Archers Co.  
Beacon Hill Craftsmen  
Indian Archery & Toy Corp.  
Fred A. Kibbe  
King Woodworking Shop  
National Archery Tackle Co.  
Outdoor Amusement Co.  
Rollin-Wilson Co.  
Rome Specialty Co.  
L. E. Stemmler Co.  
Woodcraft Equipment Co.  
Ye Sylvan Archer

## ATHLETIC FIELD SUPPLIES

**Amplifying Systems for Football Fields and Gymnasiums**

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Operadio Mfg. Co.  
Westinghouse Electric & Mfg. Co.  
Wright De Coster, Inc.

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Bauman Iron Works  
Dixie Portable Bleachers Co.  
Giant Mfg. Co.  
Hussey Mfg. Co.  
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\*Fred Medart Mfg. Co.

## MEDART

### Telescopic Gym Seats

Conserve valuable floor space. Medart Gym Seats are built around a safety-plus appreciation of the telescopic principle.

Wall attached and Movable types.

Write for catalog GS-2

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Newcastle Products, Inc.  
Penn Bleacher Seat Co.

**Bleachers, Portable or Folding**  
Portable type for use indoors or out on the athletic field.

Fold-A-Way bleachers for the modern gymnasium.  
See catalogue 35F.

UNIVERSAL BLEACHER CO.  
Champaign, Ill.

Universal Bleacher Co.  
Walter C. Urling  
Wayne Iron Works

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(Wire fences for enclosing athletic fields)  
Anchor Post Fence Co.  
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Continental Steel Corp.  
Cyclone Fence Co.  
\*Page Steel & Wire Div., Amer. Chain & Cable Co.  
Pittsburgh Steel Co.  
Stewart Iron Works Co., Inc.

## Flood-lighting Equipment

\*American Playground Device Co.  
\*Benjamin Electric Mfg. Co.

WRITE DIRECTLY TO THE COMPANIES FOR THEIR CATALOGUES. SCHOLASTIC COACH ADVERTISERS ARE STARRED, AND THEIR ADDRESSES WILL BE FOUND ON PAGE 2. FOR OTHER ADDRESSES WRITE SCHOLASTIC COACH, 250 E. 43rd ST., NEW YORK, N. Y.

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Coaches in 45 high schools report Benjamin Floodlights increase football attendance an average of 180%—many report doubled or tripled gate receipts. Write for handbook on Football Floodlighting—complete data, layout and wiring diagrams.

**BENJAMIN ELECTRIC MFG. CO.**  
Des Plaines, Illinois

Cahill Bros.  
Crouse-Hinds Co.

## Crouse-Hinds Company SYRACUSE, NEW YORK

Manufacturers of a complete line of Floodlights for All Kinds of Sports Lighting

SEND FOR BULLETIN 2299

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\*General Electric Co

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GENERAL ELECTRIC  
Schenectady New York

Giant Mfg. Co.  
Monarch Industries

## For super-efficient NON-GLARE FLOODLIGHTS

For football—Write to  
MONARCH INDUSTRIES  
COUNCIL BLUFFS, IA.

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Westinghouse Electric & Mfg. Co.

Grass Seed  
American Field Seed Co.

W. Atlee Burpee Co.  
Berry Seed Co.  
Burgess Seed Co.  
Deposit Seed Co.  
Ferry-Morse Seed Co.  
Monarch Industries  
Peat Import Co.  
Peppard Seed Co.  
Stumpp & Walter

## Lawn Mowers

Clipper Mfg. Co.  
Coldwell Lawn Mower Co.  
Eclipse Machine Co.  
Elwood Lawn Mower Co.  
Ideal Power Lawn Mower Co.  
Jacobsen Mfg. Co.  
Milbradt Mfg. Co.  
Moto-Mower Co.  
Pennsylvania Lawn Mower Works  
Toro Mfg. Co.  
Worthington Mower Co.

## Markers

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\*United Clay Mines Corp.

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Dixie-Vortex Co.  
Lily-Tulip Cup Corp.

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For all Sports • Convenient • Sanitary • Inexpensive

1—18 Cup Wire Carrier Tray  
1000—5 oz. Lily Cups

**Complete for \$6.85 del'd.**

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\*Gulf Oil Corp.  
\*Solvay Sales Corp.

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On: Playgrounds, school yards, tennis courts, baseball fields, athletic fields, driveways, roads, walks, parking spaces, and other gravel cinder, earth, or clay surfaces.

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SOLVAY SALES CORPORATION

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## Scoreboards (Electric)

Autochron Clock Co.  
The Fair Play Co.  
Mayhugh Scoring Machine Co.  
\*Neveco Scoreboard Co.



NEVCO SCOREBOARD COMPANY  
GREENVILLE ILLINOIS



J. E. Porter Corp.  
Simplex Co.  
\*Wilson Mfg. Co.

#### Turnstiles

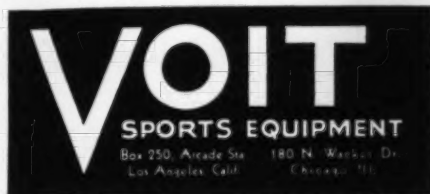
Perey Turnstile Co.

### ATHLETIC SUPPORTERS

Bennett-Landon Web Co.  
\*Bike Web Mfg. Co.  
\*Dubow Mfg. Co.  
\*P. Goldsmith Sons, Inc.  
\*Johnson & Johnson  
Lane Mfg. Co.  
\*Seamless Rubber Co.  
Walter F. Ware Co.

### BALLS

(See Complete Equipment headings under  
Baseball, Basketball, Football.)



### Bladders

(For all inflated balls)

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\*P. Goldsmith Sons, Inc.  
Ken-Wel Sporting Goods Co.  
Lowe & Campbell Ath. Goods Co.  
Rawlings Mfg. Co.  
\*Seamless Rubber Co.  
A. G. Spalding & Bros.  
Tyer Rubber Co.  
\*W. J. Voit Rubber Co.  
Wilson Sporting Goods Co.

### Rubber Compo. Balls

(Football, Basketball, Playground Balls)

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\*Seamless Rubber Co.  
\*W. J. Voit Rubber Co.  
C. B. Webb Co.  
The Wintark Co.

### BASEBALL

#### Complete Equipment

(Balls, bats, bases, uniforms, gloves, caps, shoes, bags, scorebooks, masks, protectors, shin guards)

\*American Sporting Goods Co.  
Arrow System (bases)  
\*Cullum & Boren Co.  
\*Dubow Mfg. Co.  
\*P. Goldsmith Sons, Inc.  
Ken-Wel Sporting Goods Co.  
Lannom Mfg. Co. (balls)  
Lowe & Campbell Ath. Goods Co.  
\*National Sports Equipment Co. (bases)  
Premier Gym Mat. Co. (body protectors)  
Rawlings Mfg. Co.  
A. J. Reach, Wright & Ditson, Inc.  
A. G. Spalding & Bros.  
Wilson Sporting Goods Co.

### Bats

Edwards Ball Derby Corp.  
Hanna Mfg. Co.  
Hillerich & Bradsby Co.  
Joseph G. Kren Co.

### Home Plates

Goodrich Rubber Co.  
\*Seamless Rubber Co.  
\*U. S. Rubber Co.

### Shoes

(See special listing under Shoes)

### Uniforms

Chicago Sports Equipment Co.  
Felco Athletic Wear  
Maple Mfg. Co.  
Piscataway Mills, Inc.  
Post Mfg. Co.

*When ordering your*

### Basketball Uniforms

*be sure to specify*

### KAHNFAST SATINS

### BASKETBALL

#### Complete Equipment

(Balls, uniforms, warm-up suits, shoes, goals, scorebooks)

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Champion Knitwear Mills, Inc.  
\*Cullum & Boren Co.  
\*Dubow Mfg. Co.

### DUBOW ATHLETIC EQUIPMENT

In addition to the famous Dubow OFFICIAL-NATIONAL FEDERATION APPROVED basketball and football, we manufacture a complete line of other basketballs, footballs, soccer and volley balls, boxing gloves, striking bags, baseball gloves and equipment, golf clubs and leather coats. All proved "BEST BY TEST."

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\*Mishawaka Rubber & Woolen Mfg. Co.  
\*Pearson Sporting Goods Co.  
\*O'Shea Knitting Mills (uniforms)  
A. J. Reach, Wright & Ditson, Co.  
\*Schutt Mfg. Co. (Inner practice rings)  
A. G. Spalding & Bros.  
Wilson Sporting Goods Co.

### Backstops

\*EverWear Mfg. Co.  
\*Fred Medart Mfg. Co.  
J. E. Porter Corp.  
\*Schutt Mfg. Co.

### Basketball Goal Signal

\*Bask-O-Lite Co.

### Shoes

(See special listing under Shoes)

### BOOKS

Any book published may be ordered through Scholastic Coach Bookshop at the regular price. Rule books and guides should be ordered directly from the publisher: American Sports Publishing Co., 105 Nassau St., New York City, if an N.C.A.A. production; National Federation of State High School Athletic Associations, 11 South LaSalle Street, Chicago, if official interscholastic rules are desired (available in football rules, football play situations, and basketball play situations booklets).

### CLEANERS, CONDITIONERS

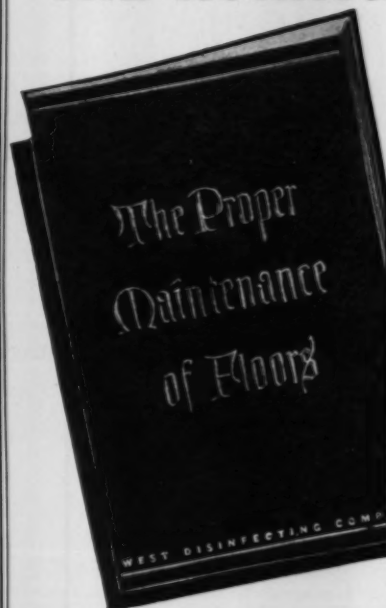
American Cleaners & Dyers  
Arrow System  
\*The Barry Reclaiming Co.

### THE BARRY RECLAIMING CO. INCORPORATED

Reconditioners of  
Athletic Equipment

HOLYOKE MASSACHUSETTS

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HUNDREDS OF DOLLARS IN  
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The following types of floors  
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### GYMNASIUM FLOORS

UNPAINTED WOOD	PAINTED OR VARNISHED SURFACE
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Brookins System  
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**MARBA SYSTEM**  
*Scientific RECONDITIONING  
for all kinds of*  
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S. J. Russell Co.  
F. H. Veath & Son

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\*Dubow Mfg. Co.  
Eagle Regalia Co.  
\*P. Goldsmith Sons, Inc.  
Ken-Wel Sporting Goods Co.  
\*O'Shea Knitting Mills  
Rawlings Mfg. Co.  
A. J. Reach, Wright & Ditson, Inc.  
A. G. Spalding & Bros.  
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Most complete line ever offered. See your  
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**55 East 11th St. New York, N. Y.**

\*Vince Fencing Equipment, Inc.

IN FENCING THE NAME IS

# VINCE

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Don't Miss News on Page 39

### FOOTBALL

Complete Equipment  
(Balls, headgear, jerseys, pants, shoes,  
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\*American Sporting Goods Co.  
\*Champion Knitwear Mills, Inc.  
\*Cullum & Boren Co.  
\*Dubow Mfg. Co.  
\*P. Goldsmith Sons, Inc.  
\*Hodgman Rubber Co. (parkas)  
Ken-Wel Sporting Goods Co.  
Lowe & Campbell Ath. Goods Co.

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The OFFICIAL balls APPROVED by the National Federation of State High School Athletic Associations for NINE SUCCESSIVE YEARS. These are Championship balls for Championship play and will meet your most exacting requirements. Write for catalogue.

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Quality  
ATHLETIC EQUIPMENT  
Since 1876

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Use **Wilson**  
EQUIPMENT  
for every sport

WILSON SPORTING GOODS CO.  
Chicago, New York and other principal cities  
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\*Rae Crowther, Inc.  
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BUILDER OF BETTER BLOCKING

The best in football field equipment. Preferred by coaches and players. A necessity for efficient practice. Used by the leading teams of the country.

Football Field Equipment  
MARTY GILMAN GILMAN, CONN.

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Everlastik, Inc.  
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### Pneumatic Football Helmets

Arrow System

### BASEBALL BASES GYM MATS

Tackling and Blocking Dummies  
Pneumatic Football Helmets

ARROW SYSTEM

Lawrence

Massachusetts

### Shoes

(See Special listing under Shoes)

When ordering your

## Football Uniforms

be sure to specify

## KAHNFAST SATINS

### Wrenches for Cleats

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\*John T. Riddell, Inc.

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1205 Walnut Street, Philadelphia, Pa.

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Complete Equipment

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\*Fred Medart Mfg. Co. (seating)  
\*Narragansett Machine Co.  
Premier Gym Mat Co.  
Porter Corp.

### Cloth

(For Gym Uniforms)

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Hirsch-Werner, Inc.  
\*Arthur Kahn Co.  
Pacific Mills  
\*Stone Mill Fabrics Corp.

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FOR ALL ATHLETIC UNIFORMS

It's Tough

STONE MILL FABRICS CORP.  
40 WORTH ST., NEW YORK CITY

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KAYSAN — Penetrating Wood Floor  
Sealer and Finish. More Wear—Less  
Care.

THE AMERICAN CRAYON CO.  
SANDUSKY, OHIO

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\*Continental Car-Na-Var Corp.  
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Manufacture . . .  
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Also approved disinfectants, soaps and floor cleansers. Inquiries solicited.

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Dubuque, Iowa

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Vestal Chemical Laboratories.  
\*West Disinfecting Co.

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Arrow System  
C. R. Daniels, Inc.  
Everlast Corp.  
\*Fred Medart Mfg. Co.  
\*Naragansett Machine Co.  
\*National Sports Equipment Co.

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Heavy 21-oz. white duck  
Hair Felt  
Hand Tufted  
Boxed Edges  
Handles that stay

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PETERSEN

## GYM MATS

for TUMBLING, BOXING, WRESTLING

WRITE FOR CATALOG

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Premier Gym Mat Co.  
Union Canvas Goods Co.  
U. S. Tent & Awning Co.

### Gym Suits

(Girls' Gym and Play Suits)

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Broderick Athletic Togs  
Chancellor & Vaughn  
Ihling Bros. Everard Co.  
Kuttbauer's  
Levi-Ottenheimer Co.  
McCarthy Simon, Inc.  
E. R. Moore Co.  
E. B. Myers Co.  
\*National Sports Equipment Co.  
The Strouse-Baer Co.

### Gauges

(Athletic, pressure)

\*P. Goldsmith Sons, Inc.  
A. Schrader's Son

A. G. Spalding & Bros.  
Wilson Sporting Goods Co.

### Shoes

(See special listing under Shoes)

### HORSESHOES

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Mossman Horseshoe Co.  
Octigan Forge & Mfg. Co.  
Ohio Horseshoe Co.  
Pratt Mfg. Co.  
St. Louis Horseshoe Co.

### Rubber Horseshoes

Essex Rubber Co.  
Rubbercraft Corp.  
\*Seamless Rubber Co.  
Wolverine Supply & Mfg. Co.

### ICE HOCKEY

#### Complete Equipment

(Pucks, sticks, skates, uniforms)

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\*P. Goldsmith Sons, Inc.  
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Lovell Mfg. Co. (sticks)  
Northland Ski Mfg. Co. (sticks)  
Rawlings Mfg. Co.  
A. J. Reach, Wright & Ditson, Inc.  
A. G. Spalding & Bros.  
Wilson Sporting Goods Co.

### Pucks

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\*Seamless Rubber Co.  
\*U. S. Rubber Co.

### Skates

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Brooks Shoe Mfg. Co.  
Canada Skate & Shoe Co.  
C.C.M., Inc.  
Alfred Johnson Skate Co.  
Nestor Johnson Mfg. Co.  
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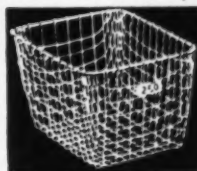
### LEATHER PRESERVATIVES

Bauer, Inc.  
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\*Ivory System  
Geo. H. Lesser  
Rayleo Specialty Co.  
Snow-Proof Co.  
Viscol Co.

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\*American Wire Form Co.



No-Germ Heavy Service  
**LOCKER BASKETS**  
Woven and Welded  
Insist upon No-Germ Baskets  
(Look for Label). They equip  
many Gyms. Cost less—last  
longer. Assorted sizes. Consult  
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**AMERICAN WIRE FORM CO.,**  
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Kaspar Wire Basket Works

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\*American Playground Device Co.  
\*C. B. Dolge Co.  
Everson Filter Co.  
\*EverWear Mfg. Co.  
J. E. Porter Corp.  
T. A. Patterson Laboratories.

### Foot Bath Solutions

Chemical Equipment Co.  
\*C. B. Dolge Co.  
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Always take along a can of

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Its many first-aid uses make it indispensable to the vacationist. It is antiseptic, soothing, and promotes early healing. Apply it as an emergency dressing

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to a Cut,  
Wound,  
Sore, Burn,  
Sunburn,  
Blister,  
Bruise, In-  
sect Sting,  
and wher-



ever Inflammation and Congestion are present.

Sample to Coaches, Trainers  
and Athletic Directors

**The Denver Chemical Mfg. Co.**  
167 Varick Street  
New York City



\*Huntington Labs., Inc.  
Mathieson Alkali Works, Inc.  
\*Midland Chem. Labs., Inc.  
Pennsylvania Salt Mfg. Co.  
J. E. Porter Corp.  
Wallace & Tiernan, Inc.  
\*West Disinfecting Co.

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Durabilt Steel Locker Co.  
Lyon Metal Products, Inc.  
\*Fred Medart Mfg. Co.  
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\*Naragansett Machine Co.

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National Lock Co.  
Sesamee Co.  
Yale & Towne Mfg. Co.

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\*Fred Medart Mfg. Co.  
J. E. Porter Corp.

#### Locker Room Cleansers

\*C. B. Dolge Co.  
Durabilt Steel Locker  
Mathieson Alkali Works, Inc.  
Pennsylvania Salt Mfg. Co.  
Perkins Laboratories  
Sterling Products Co.  
\*West Disinfecting Co.

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Geo. F. Hubbs Co., Inc.

#### Tile Cleansers

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#### L. G. Balfour Company ATTLEBORO MASSACHUSETTS

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MINIATURE SPORT BALLS  
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Rawlings Mfg. Co.  
A. J. Reach, Wright & Ditson, Inc.  
A. G. Spalding & Bros.  
Wilson Sporting Goods Co.

### PADS

(Elbow and Knee for baseball,  
basketball and football)

\*Bike Web Mfg. Co.  
Kelley Knee Pad Co.  
O-C Mfg. Co.  
\*O'Shea Knitting Mills

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\*Bell & Howell Co.

Motion Picture Cameras and Projectors  
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Professional Results with Amateur Ease

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plus positive protection against film  
damage. Write for Literature.

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(For Motion Picture Cameras)  
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Eastman Kodak Co.  
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Keystone Mfg. Co.  
Kin-O-Lux, Inc.

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Erpi Classroom Films, Inc.  
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Giant Mfg. Co.  
\*Fred Medart Mfg. Co.  
Mitchell Mfg. Co.  
C. W. Parker  
J. E. Porter Corporation  
Rawlings Mfg. Co.

### PUBLICATIONS

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American Sports Publishing Co.  
Spalding's Athletic Library  
Athletic Journal  
Baseball Magazine  
Camping  
Scholastic Coach  
Field & Stream  
Health & Physical Education Digest  
Hygeia  
Journal of Health & Physical Education  
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Recreation

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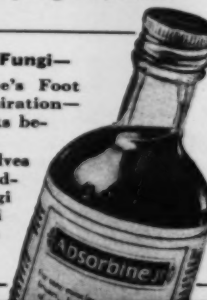
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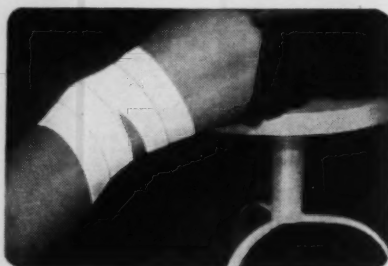
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## Injury Prevention

(Continued from page 9)

cost; and the pad itself did not cost as much as several of the better known hip pads. They cost about \$5 a pair. Other standard hip pads were also used, the cost of which ran up to \$6.50 per pair. These did not give us nearly as satisfactory results.

To supplement the blocking pad during the past season, we used a number of the rib protectors designed in the form of vests. These gave us fairly good results and showed only one possible weakness—they left an exposed area near the solar plexus.



Special Hip Pad

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\*By C. E. Forsythe, State Director of Athletics, Michigan State High School Athletic Association

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August 15 to 27, 1938

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The school will be conducted under the leadership of Robert A. Fetzer, director of athletics at the University of North Carolina. Instruction will be given by the members of the coaching staff of the University.

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*For illustrated announcement, address*

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Chapel Hill, N. C.

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University of Alabama

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Hammond Hi, Indiana

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College of City of New York  
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South Side Hi, Fort Wayne, Ind.

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3301 S. Harrison St.  
Fort Wayne Indiana

## Coaching School Directory

AMERICAN FOOTBALL INSTITUTE, Atlantic City, N. J. Aug. 22-27. John Da Grosa, director. See advertisement on page 35.

BUTLER UNIVERSITY—Indianapolis, Ind. Aug. 8-13. Paul D. Hinkle, director. See advertisement on this page.

CATALINA ISLAND—Catalina Island, Calif. Aug. 8-13. Sam Barry, director.

CORNELL UNIVERSITY—Ithaca, N. Y. June 27-July 2. George K. James, Director. See advertisement in April issue.

DUKE UNIVERSITY—Durham, N. C. July 25-30. Wallace Wade, director. See advertisement in May issue.

FORT WAYNE—Fort Wayne, Ind. Aug. 8-13. Burl Friddle, director. See advertisement on this page.

INDIANA BASKETBALL SCHOOL—Logansport, Ind. Aug. 15-19. Cliff Wells, director. See advertisement in May issue.

KANSAS STATE HIGH SCHOOL—Topeka, Kans. Aug. 22-27. E. A. Thomas, director.

MISSOURI STATE HIGH SCHOOL—Columbia, Mo. Aug. 22-24. Ralph Husted, director.

NEW YORK HERALD TRIBUNE FOOTBALL SCHOOL—New York, N. Y. Aug. 29-Sept. 2. Stanley Woodward, director.

NORTHWESTERN UNIVERSITY—Evanston, Ill. Aug. 15-27. K. L. Wilson, director. See advertisement on this page.

PENNA. STATE COLLEGE—State College, Penna. Main Session, June 27-Aug. 5; Inter-Session, June 7-24; Post Session, Aug. 8-26. See advertisement in April issue.

TEXAS HIGH SCHOOL—Lubbock, Tex. Aug. 1-6. Carroll Wood, director.

UNIVERSITY OF INDIANA—Bloomington, Ind. Aug. 1-5. Z. G. Clevenger, director.

UNIVERSITY OF KENTUCKY—Lexington, Ky. June 6-11. Bernie A. Shively, director.

UNIVERSITY OF MICHIGAN—Ann Arbor, Mich. June 27-Aug. 5. Fielding H. Yost, director.

UNIVERSITY OF NORTH CAROLINA—Chapel Hill, N. C. Aug. 15-27. Robert A. Fetzer, director. See advertisement on this page.

UTAH STATE COLLEGE—Logan, Utah, June 13-17. E. L. Romney, director.

WEST VIRGINIA UNIVERSITY—Morgantown, West Virginia. August 8-13. Alden W. Thompson, director. See advertisement on page 35.

WISCONSIN COACHING SCHOOL—Milwaukee, Wis. Aug. 22-27. Herman Kluge, director. See advertisement on this page.

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# FINANCING

## Extra-Curricular Activities

By C. W. Hackensmith

C. W. Hackensmith, intramural supervisor at the University of Kentucky, outlines a plan for financing an extra-curricular program in high schools which has been used successfully by Buford Clarke at the Benham, Ky., High School.

**M**ANY high schools each year face the problem of financing extra-curricular activities such as athletics, intramurals and dramatics. In some cases the gate receipts from athletic events pay or partially pay for itself and other activities. Seldom are all the activities self-sustaining; there are always some that depend upon other agencies to keep them going. At Benham High School a system has been installed whereby the entire program of extra-curricular activities pay for themselves. The system, devised by Buford Clarke, formerly of Benham, is called "The Activity Card Plan."

Activity Card  
Danville High School  
Danville, Kentucky

Student's name \_\_\_\_\_

Date issued \_\_\_\_\_ Home Room \_\_\_\_\_

Home Room Teacher \_\_\_\_\_

(Not Transferable)

An activity card is issued twice a year or at the beginning of each semester. One side contains the name of the high school, the student's name, the home room number and teacher's name, and the date of issue. On the other side is a list of events for the semester with corresponding numbers on the margin of the card. (See illustration.)

### SCHEDULE OF EVENTS 1938-'39

1. Danville vs. Richmond	Sept. 23
2. Fall Outing Party	Sept. 27
3. Danville vs. Lancaster	Oct. 7
4. College Singers	Oct. 14
5. Movies	Oct. 20
6. Danville vs. H. Clay	Oct. 28
7. Halloween Party	Oct. 31
8. Danville vs. M. M. I.	Nov. 11
9. Touch Football Finals	Nov. 16
10. Danville vs. Corbin	Nov. 26
11. Symphony Orchestra	Dec. 2
12. Movies	Dec. 6
13. Danville vs. Georgetown	Dec. 16
14. Christmas Party	Dec. 23
15. Danville vs. M. M. I.	Jan. 6
16. Seven Keys to Balldate	Jan. 10
17. Danville vs. Versailles	Jan. 20

(Concluded on page 38)



"Tad" Wieman  
Princeton  
Line Play

## West Virginia University

1938

### Coaching School

Aug. 8-13



"Doc" C. Carlson  
Pittsburgh  
Basketball



"Dick" Harlow  
Harvard  
Team Strategy



"Gus" Dorais  
Detroit  
Forward Pass



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Defense, Five-Man Line,  
Scouting"

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Temple University  
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System of Coaching

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Philadelphia Eagles  
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Injuries"

### MacMURDO

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If you have something for this column send it to Bill Wood, University High School, Iowa City, Iowa.

**Ivan Blackmer** claims that one of the ardent fans of Postville, Iowa, gave his captain five dollars after an early season game and suggested that the boy use it to buy the team new suits or in any way that he felt would be "to the best advantage of the team."

The well-wisher was considerably disappointed the following week when the visiting team trotted out on the floor resplendent in brilliant new uniforms while the home team appeared in the same old outfits. He called the captain over to the sideline: "Where's that five dollars I gave you to buy new suits with?"

"You told me to use it in any way that would help us the most, didn't you? Well, I gave it to the referee."

**Dust off a laurel wreath** for Winston J. Schuler of Marshall, Mich., one of the state's ace officials, who tells perhaps the best of all rainy day stories.

"It had rained all week, a steady downpour that left the ground in a mellow, juicy condition. Since the regular gridiron was being resodded, it was necessary to play the game on the only plot of ground available. This temporary playing field, a transformed garden patch, was on a piece of low ground near what is known in those parts as a river. (Any stream that you can't get across on the first jump.) As the rain continued to fall, the little river finally overran its banks and flooded the ex-garden patch, leaving many depressions completely filled with water. Despite the weather and the condition of the soil, the annual classic between the twin towns could not be postponed.

"The first punt of the game was a lofty spiral that went almost straight up before taking a back spin and coming down with terrific force in one of the water-and-mud-filled depressions near the sideline. The pigskin was

completely submerged. Schuler called for the ball, but not a man on the receiving team moved. All stood watching the circle of bubbles forming in the puddle where the ball had disappeared. Finally, the punter called out, 'Come on! Toss the ball to the Ref and let's get going.'

"'Aw Hell,' the safety man replied disgustedly, 'you get it. You kicked it in there. You ought to know where it went.'"

**Unique among basketball teams** of last season was the one formed by Marjorie Schnake, Indiana State Teachers College co-ed. When her boy friends became so numerous that they interfered with her study schedule, she rounded up suits for the lot and entered them in the intramural league.

**Coach A. R. Gilbert** of Graceland College knew that he was to work the game at Lineville High School. He drove up to the lighted school building, changed into his official's uniform and hurried out onto the floor. There, much to his surprise, he found Leon playing Garden Grove. He had taken the wrong turn, stopped in the wrong town, dressed in the wrong gymnasium, and was prepared to work the wrong game at the wrong time.

**The referee** is often threatened, yet so far as I know the only case on record of one actually losing his life is that of Robert Dodd, 20, who was killed early in February at Black Fox, Tenn., in a brawl growing out of a "pick-up" basketball game after hours back of the school building. The weapon used was a sassafras stick.

**Because of a sunburn** the meet was lost. Roodhouse and Pittsfield were just about even at the District Meet at Jacksonville, Ill., last week. The concluding event was the mile relay. Bruce Royalty, who ran third for Pittsfield, took off his track shirt to keep it

from rubbing against his painfully sunburned back. Pittsfield won the relay, but someone protested that Royalty had broken the rules in running shirtless. H. V. Porter, state director of athletics, sustained the protest. Roodhouse won the meet, 22 to 19.

**Several readers have** written in about the "Cock-eyed Wonder" basketball story that was mentioned last month. It appeared in the *Saturday Evening Post*, Feb. 24, 1934, if my notes are correct. The author is Richard Macaulay.

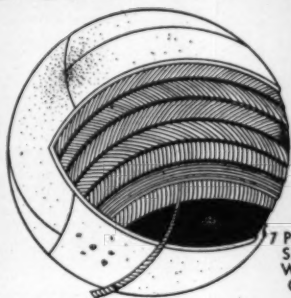
**Larry Saltis**, who coaches at one of the Mansfield, Ohio, schools, tells of the trials of a friend of his who, in his first year out of college, was called upon to coach a rural school.

"His team was the greenest of the green. One boy in particular couldn't be broken of the habit of shooting at the wrong basket. One night toward the end of the third quarter of a game in which his team was hopelessly outclassed, the forgetful one became confused again and made another basket for his opponents. That was too much for my friend. He climbed up on the bench and shouted, 'That's all right! Shoot 'em in any basket! Here's my hat, shoot in it.'"

**Herbert Falck**, a forward, had played in 12 basketball games for Hortonville, Wis., High during the past season and had not scored a point. Hortonville was playing Freedom for consolation honors in the Kimberly district tournament when he got his chance. With the score tied at 20 all and two seconds to go, he was awarded a free throw. Needless to say it didn't touch the rim when it dropped through the hoop. His only point of the season meant awards for all the boys. (Thanks to Coach George S. Akin for that one.)

**We are grateful** to Superintendent R. R. Watson of New Market, Iowa, for

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the privilege of quoting the following excerpts from his speech at the six-man football clinic held in Ames recently.

"The spectator of the six-man game certainly gets a break. Since there are only twelve men on the field, the fan can see every man on every play, the blocker and tackler as well as the ball carrier. Better grounding in fundamentals is apparent as a result, because each boy knows that he is being watched by everyone on every play. . . . There is more scoring in the six-man game. It is usually distributed through all four quarters, too, and scoring is what the average fan likes. In addition, with the forward pass a vital weapon and every man eligible, anyone may score. Even the center can be a hero. . . . As the game is almost always in the open, tricky plays, reverses, open-field running, and forward passing predominate. And this is the type of game that the average spectator enjoys most. Most small town enthusiasts are basketball followers; the six-man game is right down their alley."

Superintendent D. D. Slocum of Massena, Iowa, spoke at the same meeting on the average cost of a six-man program. His figures correspond very closely to those which appeared last month in *Scholastic Coach*. He reports that Massena has broken even for the sport during the last three years and is highly in favor of the game for small schools and intramural programs.

Dwight Keith reports the recent merger in Georgia of the Football Coaches Association and the High School Coaches Association into a strong state-wide organization to be known as the Georgia Athletic Coaches Association. Secretary Keith is eager to get in touch with the secretaries of similar organizations in other states. His address is 888 Boulevard, N. E., Atlanta, Georgia.

A certain Big Ten official was once assigned the task of picking fourth place in the high hurdles. It was a thrilling race from start to finish with the victor establishing a new meet record. When the head judge asked the B.T.O. mentioned above for his selection, he got this reply: "Well, I don't know. I was so busy congratulating the winner that I forgot who did come in fourth." Just another forgotten man.

As we lay aside our pen for another year, may we express our deep appreciation for the splendid support given us by readers and contributors alike. We are sorry that lack of space prevented a number of excellent items from appearing that we had hoped to use. *Coaches' Corner* is just what you make it, and if you enjoy it, let's make it better next year.

BILL WOOD

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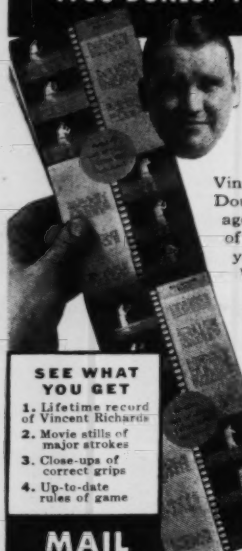
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## Financing Activities

(Continued from page 35)

The events scheduled for each semester call for definite planning before the start of each school year. School outings, dramatics, special speakers, movies, athletic events, intramural events, orchestrations, school parties in celebration of holidays, and many other events of interest to the students may fill the requirements of an activity card event. A committee composed of teachers who are involved in preparing extra-curricular activities should assist in organizing the schedule of events for each semester.

When the activity cards have been printed they are distributed among the home room teachers who keep them in their possession after the cards have been signed by each student. Previous to the date of an event the student pays his nickel or dime and the card number is punched. The activity card becomes his property after payment. Should a student skip a few events and then find one he especially desires to attend, he must pay for the back events before he is permitted to attend that particular affair.

After the entertainment the cards are gathered together and promptly separated into piles by means of the home room number, and returned later to the home room teacher who keeps them in her possession until the next school event.

A student who desires to pay for the entire school semester may do so, but the card is always returned to the home room teacher. Worthy students who cannot afford the sum required for attendance may be given work that is connected directly or indirectly with the event scheduled.

The sum derived from the activity cards is apportioned to athletics, intramurals, dramatics, the orchestra, and any other participating extra-curricular agency. The division of receipts should be made with every degree of fairness to all parties concerned.

The amount charged the student will, of course, depend upon estimated yearly cost of all participating agents and the number of potential student spectators or participants in the school.

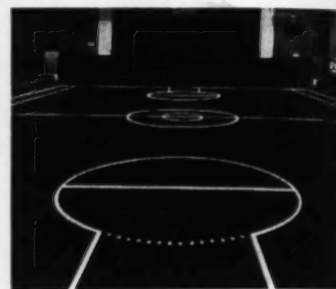
The activity card plan will encourage a more wholehearted attendance at the many school events by a very inexpensive means. The student instead of skipping events which in reality are a part of his social training will be indirectly guided into experiencing participation in those things that he ordinarily might or might not shun.

## New Molded Football

The trend in ball manufacture indicates that in the near future there will be a molded football corresponding to the molded basketball already in wide use. Manufacturers of Duro-Cord have introduced a ball that is wound with seven plies of cord and vulcanized together with pure liquid rubber. This process creates a ball that is perfectly shaped and super strong.

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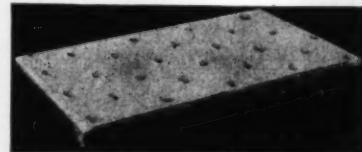
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# Football for All

By Edward H. Knalson

Edward H. Knalson coaches the six-man football team at Coleharbor, N. D., High School. During the past season he annexed the conference championship with only eight men on the team.

**F**EW sports can match the appeal that football has to the average boy of high school age. But since the cost of maintaining a football team is prohibitive to the athletic budget of the smaller schools, many of the nation's youth are denied a chance to play the game. Statistics show that less than fifty percent of the high schools in the country maintain regular football teams.

Six-man football may be the answer to the problem. Here is a game that has all the thrills of the regular game and is still within reach of the small school budget. The cost of equipment and the burden of carrying out the program is cut in half. Although the first game of six-man football was played in Nebraska less than five years ago, the game already is firmly entrenched in several hundred high schools and is making headway in the intramural programs of our colleges and universities.

## Rounds out program

But six-man's outstanding contribution has been to the program of the small high school, just as it was intended to do in its inception. In North Dakota, where over 100 schools play the game, we have found that it rounded out the program more fully. From September to the basketball season used to be a dull period for athletic activities in the smaller schools, until six-man football moved in to take up the slack.

Many football men believe that six-man football is detrimental to the best interests of the regular game but statistics do not support this theory. Surveys have indicated that six-man and eleven-man flourish in the same area and do not thrive at the expense of each other.\* Both games are football and have the same attraction to the players and spectators. It is up to the coaches of six-man football to keep it as close to the

regulation game as possible. Any radical departures may hurt the popularity of the abbreviated game.

At present the six-man game is really regulation football with modifications because of the fewer players. Six-man football is played on a smaller field but the gridiron is of such size that each player actually

has more square yards to defend than an eleven-man player. This naturally encourages a more open type of game with more passing and end sweeping, which, in turn, leads to higher scores. Although the punt formation is a favorite six-man offensive alignment, there is less punting than in the eleven-man game.

The abbreviated game is more of a man-to-man affair, especially on defense. Blocking and tackling also depend almost entirely on a single

(Concluded on page 40)

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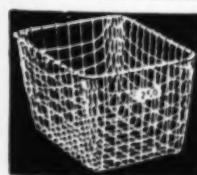
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\* Stephen Epler, *Recent Trends in Six-Man Football*, in the September, 1937, Scholastic Coach.



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individual. The boy can rarely depend upon help from a teammate; he's got to make the block or tackle by himself. Double teaming is rare.

#### Qualifications of players

The qualifications of the players on a six-man team are about the same as in regulation football. The center must be a good ball-handler and quick to size up the opponents' line both on offense and defense. The ends should be shifty, good pass receivers and must be able to go down fast under punts. The quarterback seldom carries the ball but, paradoxically, he is the main ball-handler in the backfield. This paradox is possible only in six-man football where the ball must be passed backward by the man who receives the center snap before anybody can run with it. In addition to his ball-handling ability, the quarterback should be fast and the sparkplug of the team. The ideal fullback is big, a good ball-carrier and a hard blocker. The main burden of ball-carrying falls on the halfback who should also be an accomplished kicker and passer.

In order to have a well-rounded team each player should be able to handle any position on the team. The rules allow the men on the offensive team to switch positions on any play; hence it is of definite advantage to have players who can shift positions without weakening the team. This means, of course, that the players must learn all the assignments on every play and know the signals perfectly.

The rule which encourages the shifting of positions is a good one, especially to the small school where only seven or eight good men are available. If one man is injured, the team may shift the better men into the key positions and operate with the substitute in a less important role.

Injury incidence is low in six-man. It is an established fact that most football injuries result from mass play. With fewer men on the field and a wide open game prevailing, it naturally follows that the six-man game engenders fewer hazards for the player.

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